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Before the

UNITED STATES POSTAL RATE COMMISSION

In the Matter of: POSTAL RATE AND FEE CHANGES

Docket No. R97-1

VOLUME 17

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BEFORE THE

POSTAL RATE COMMISSION

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In the Matter of: :

POSTAL RATE AND FEE CHANGES : Docket No. R97-1

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Third Floor Hearing Room
Postal Rate Commission
1333 H Street, N.W.
Washington, D.C. 20268

Volume 17
Thursday, December 4, 1997

The above-entitled matter came on for hearing, pursuant to notice, at 9:35 a.m.

BEFORE:

HON. EDWARD J. GLEIMAN, CHAIRMAN
HON. W. H. "TREY" LeBLANC, III, COMMISSIONER
HON. GEORGE A. OMAS, COMMISSIONER

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C O N T E N T S

E X H I B I T S

EXHIBITS AND/OR TESTIMONY	IDENTIFIED	RECEIVED
Designation of Written Cross-Examination of Charles L. Crum, USPS-T-28		7978
Exhibit K, Table 7, USPS-T-28		8019
Additional Designation of Written Cross-Examination of Charles L. Crum, USPS-T-28		8024
Exhibit No. AMMA-XE-1, USPS-T-28	8051	8052
Supplemental Testimony and Exhibits of Carl G. Degen, Exhibit No. USPS-ST-47	8123	8123
Designation of Written Cross-Examination of Carl G. Degen, USPS-ST-47		8124

P R O C E E D I N G S

[9:35 a.m.]

CHAIRMAN GLEIMAN: Good morning. Today we continue hearings on Docket R97-1, the Postal Service request for rates and fees. Witnesses Crum and Degen are scheduled to appear.

I have announced several times that designations of Postal Service institutional responses should be filed by Friday, December 5, so that we can incorporate them into the transcript of the December 10 hearing. Additionally, any participant that wishes to designate for incorporation into evidence an answer received too late to include when the appropriate witness appeared for cross-examination or an answer to a question posed during those hearings may designate those answers on December 10.

Does any participant have a procedural matter to raise this morning before we begin?

[No response.]

CHAIRMAN GLEIMAN: If not, our first witness today is Charles L. Crum. Mr. Crum is already under oath and is scheduled to appear to respond to additional questions with respect to USPS-T-28.

Mr. Reiter, if you would call your witness.

MR. REITER: Yes, our next witness is Charles L. Crum.

Whereupon,

CHARLES L. CRUM,

a witness, was recalled for examination by counsel for the United States Postal Service and, having been previously duly sworn, was further examined and testified as follows:

CHAIRMAN GLEIMAN: Mr. Crum, have you had an opportunity to examine the packet of designated written cross-examination that was made available to you earlier today?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: If these questions were asked of you today, would your answers be the same as those you previously provided in writing?

THE WITNESS: I believe there were two small changes.

CHAIRMAN GLEIMAN: And if you could tell us what they are?

THE WITNESS: For AMMA-12, the seventh line down in response C, "highest" should be "lowest".

CHAIRMAN GLEIMAN: Any other minor changes?

THE WITNESS: Yes, I'm sorry. Yeah, the other change is to NDMS-35-A. In the third line down, the word "relatively" should be inserted before the word "much."

MR. REITER: I believe actually the second one is not, it was not designated, it's not in the packet.

CHAIRMAN GLEIMAN: Okay, if it wasn't designated, then we won't have to worry about that correction.

Mr. Reiter, if you could provide the two copies of the complete designated written cross-examination to Witness Crum with the correction to the reporter, I will direct that they be accepted into evidence and transcribed into the record at this point.

[Designation of Written Cross-Examination of Charles L. Crum, USPS-T-28, was received into evidence and transcribed into the record.]

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 1997 Docket No. R97-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF UNITED STATES POSTAL SERVICE
WITNESS CHARLES L. CRUM
(USPS-T28)

Party	Interrogatories
Advertising Mail Marketing Association	AMMA/USPS-T28-1-14
Nashua Photo Inc., District Photo Inc., Mystic Color Lab, and Seattle Filmworks, Inc.	NDMS/USPS-T28-27, 28a, 28d, 28h, 29a, 29b, 29c, 31a, 32a, 33a, 34a, 36a, 37, 38a
Office of the Consumer Advocate	AMMA/USPS-T28-1-14 NDMS/USPS-T28-27, 28a, 28d, 28h, 37, 38a, 38b, 38c

Respectfully submitted,

Margaret P. Crenshaw

Margaret P. Crenshaw
Secretary

INTERROGATORY RESPONSES OF
UNITED STATES POSTAL SERVICE
WITNESS CHARLES L. CRUM (T28)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory:	Designating Parties:
AMMA/USPS-T28-1	AMMA, OCA
AMMA/USPS-T28-2	AMMA, OCA
AMMA/USPS-T28-3	AMMA, OCA
AMMA/USPS-T28-4	AMMA, OCA
AMMA/USPS-T28-5	AMMA, OCA
AMMA/USPS-T28-6	AMMA, OCA
AMMA/USPS-T28-7	AMMA, OCA
AMMA/USPS-T28-8	AMMA, OCA
AMMA/USPS-T28-9	AMMA, OCA
AMMA/USPS-T28-10	AMMA, OCA
AMMA/USPS-T28-11	AMMA, OCA
AMMA/USPS-T28-12	AMMA, OCA
AMMA/USPS-T28-13	AMMA, OCA
AMMA/USPS-T28-14	AMMA, OCA
NDMS/USPS-T28-27	NDMS, OCA
NDMS/USPS-T28-28a	NDMS, OCA
NDMS/USPS-T28-28d	NDMS, OCA
NDMS/USPS-T28-28h	NDMS, OCA
NDMS/USPS-T28-29a	NDMS
NDMS/USPS-T28-29b	NDMS
NDMS/USPS-T28-29c	NDMS
NDMS/USPS-T28-31a	NDMS
NDMS/USPS-T28-32a	NDMS
NDMS/USPS-T28-33a	NDMS
NDMS/USPS-T28-34a	NDMS
NDMS/USPS-T28-36a	NDMS

Interrogatory:	Designating Parties:
NDMS/USPS-T28-37	NDMS, OCA
NDMS/USPS-T28-38a	NDMS, OCA
NDMS/USPS-T28-38b	OCA
NDMS/USPS-T28-38c	OCA

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
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ADVERTISING MAIL MARKETING ASSOCIATION

AMMA/USPS-T-28-1

The following question refers to Table 1 of LR-H-108, "Controlled to GFY RPW."

a. Please confirm that the average revenue generated in FY96 by Standard (A) flats is 19.04 cents per piece.

b. Please confirm that the average revenue generated in FY96 by Standard (A) parcels is 44.18¢ per piece.

c. If you cannot confirm one or more of parts a or b, please provide the calculations necessary to develop the average revenue per piece.

RESPONSE

a. Table 1 of Exhibit K in my testimony refers to only Commercial Rate letters, flats, and parcels. I confirm that your calculation is correct for Commercial Rate only.

b. Table 1 of Exhibit K in my testimony refers to only Commercial Rate letters, flats, and parcels. I confirm that your calculation is correct for Commercial Rate only.

c. If you are interested in data for both Non-profit and Commercial Rate pieces, you need to include Table 2 data in your calculations.

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AMMA/USPS-T-28-2

The following questions refer to Table 7 of LR-H-108.

a. Please provide the page number(s), line number(s) and column number(s) in LR-H-111 for line "2) Cost Avoidance of the Entry Cost Avoidance." Please provide derivation(s) if the citation(s) is (are) not to the same values as used in Table 7.

b. Please provide the page number(s), line number(s) and column number(s) in Exhibit USPS-T-29C for line "5) Presort Cost Avoidances." Please provide derivation(s) if the citation(s) is (are) not to the same values used in Table 7.

RESPONSE

a. Please refer to page 2, Results - Standard Mail (A). Also, please note that Table 7 is contained in Exhibit K in my direct testimony and not in LR-H-108.

b. Please refer to USPS-29C, pages 2 and 4. The numbers in Table 7 can be calculated by subtracting "Saturation", "High Density", "Basic" under Enhanced Carrier Route, and "3/5 Digit" under Regular Presort from "Basic" Regular Presort for "Flats or Nonletters". The Commercial Rate results from page 2 are weighted with the Nonprofit Rate results from page 4 based on the respective proportions of total Bulk Standard Mail (A) volume listed in Tables 1 and 2 of Exhibit K. Please note that errata to USPS-29C were filed on October 1, 1997.

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
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AMMA/USPS-T-28-3

Please provide detailed citations to the sources of the values in the sheets "Letter", "FLATSCT" and "PCLCST" in the EXCEL spreadsheet titled "Cstbyshp.xls."

RESPONSE

The sources for the sheets you request are pages II-1, III-1, and IV-1 respectively of Library Reference H-106.

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
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AMMA/USPS T-28-4

In Table 3 of LR-H-108, cost category "3.1a Mail Processing Variable w/Pigbk" is sourced to LR-H-106.

a. Please confirm that the data collection and analysis in LR-H-106 used to develop the costs in line 3.1a of Table 3 provide separate costs for each of the shapes: letters, flats and parcels. If you cannot confirm part a, please explain.

b. Please confirm that the result of using disaggregate costs in Standard (A) mail show the following:

	Average Costs (cents/piece)		
	Letters	Flats	Parcels
	(1)	(2)	(3)
3.1a Mail Processing Variable w/Pigbk	4.0427	4.9416	28.3512

If you cannot confirm please show and explain the calculation you would perform to get the average cost per piece.

RESPONSE

a. Confirmed that LR-H-106 includes mail processing costs by shape. Please note that Table 3 is in Exhibit K of my direct testimony.

b. Confirmed, except I get a "3" and not a "2" in the 4th digit after the decimal place for parcels.

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AMMA/USPS-T-28-5

In Table 7 of LR-H-108, line "5) Presort Cost Avoidance" is sourced to Exhibit USPS-T-29C. Please provide exact reference to Exhibit USPS-T-29C for the data used in Table 7.

RESPONSE

Please see my response to AMMA/USPS-T28-2(b).

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AMMA/USPS-T-28-6

In Table 3 of LR-H-108 line "14b Highway" and line "14c Railroad", the derivations of these costs of surface transportation by shape are obtained by "C.S. Total dist to shape by cube."

a. Please confirm that the surface transportation costs in 14b and 14c of Table 3 under the Column heading "Sum of Shapes" are the Cost Segment Totals for these lines. If you cannot confirm, please explain.

b. Please provide the source for these total costs of surface transportation.

c. Please confirm that these surface transportation costs in Table 3 are distributed to letters, flats and parcels in proportion to the total cubic feet of letters, flats and parcels, respectively. If you cannot confirm, please explain.

RESPONSE

a. Confirmed. Please note that Table 3 is part of Exhibit K to my testimony and not in LR-H-108.

b. These numbers can be found in the Base Year 1996 Cost Segments and Components Report produced by witness Alexandrovich and contained in USPS-T-5. Please see Exhibit 5A, page 43. Add the "Total Regular" and "Total Nonprof" to get the numbers in Table 3.

c. Confirmed that these surface transportation costs are distributed to shape based on our best estimate of cubic feet by shape.

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AMMA/USPS-T-28-7

The following questions involve the EXCEL spreadsheet for LH-R-108 titled Estar96.xls.

a. In the sheet titled "DATA", please provide a "decoder" that fully defines each code used in Columns A through H, inclusive.

b. In the sheet titled "wtdata", please provide headings for all Columns, a decoder for Columns A, B and C, and a source for the data in Columns D through V inclusive.

c. In the sheet titled "PISM", please provide headings for all Columns, a decoder for Column A and B, and exact source(s) for Columns C through U, inclusive.

RESPONSE

a. Column H indicates shape: 1 = letters, 2 = flats, 3 = IPPs and parcels.

Column G indicates detailed rate category, see the diagram on the following page for an explanation.

Column F indicates the numerical ordering of the detailed categories in Column G.

Column E indicates aggregate rate detail: 1 = basic, 2 = 3/5-digit, 3 = carrier route, high density and saturation.

Column D is a two digit code, with the first digit from Column E and the second digit from Column H.

Column C is a consolidation to detailed presort level by letter and non-letter rates as shown in Estar96.xls in the sheet "RateDetail".

Column B is a two digit code, where the first digit is Column H and the second

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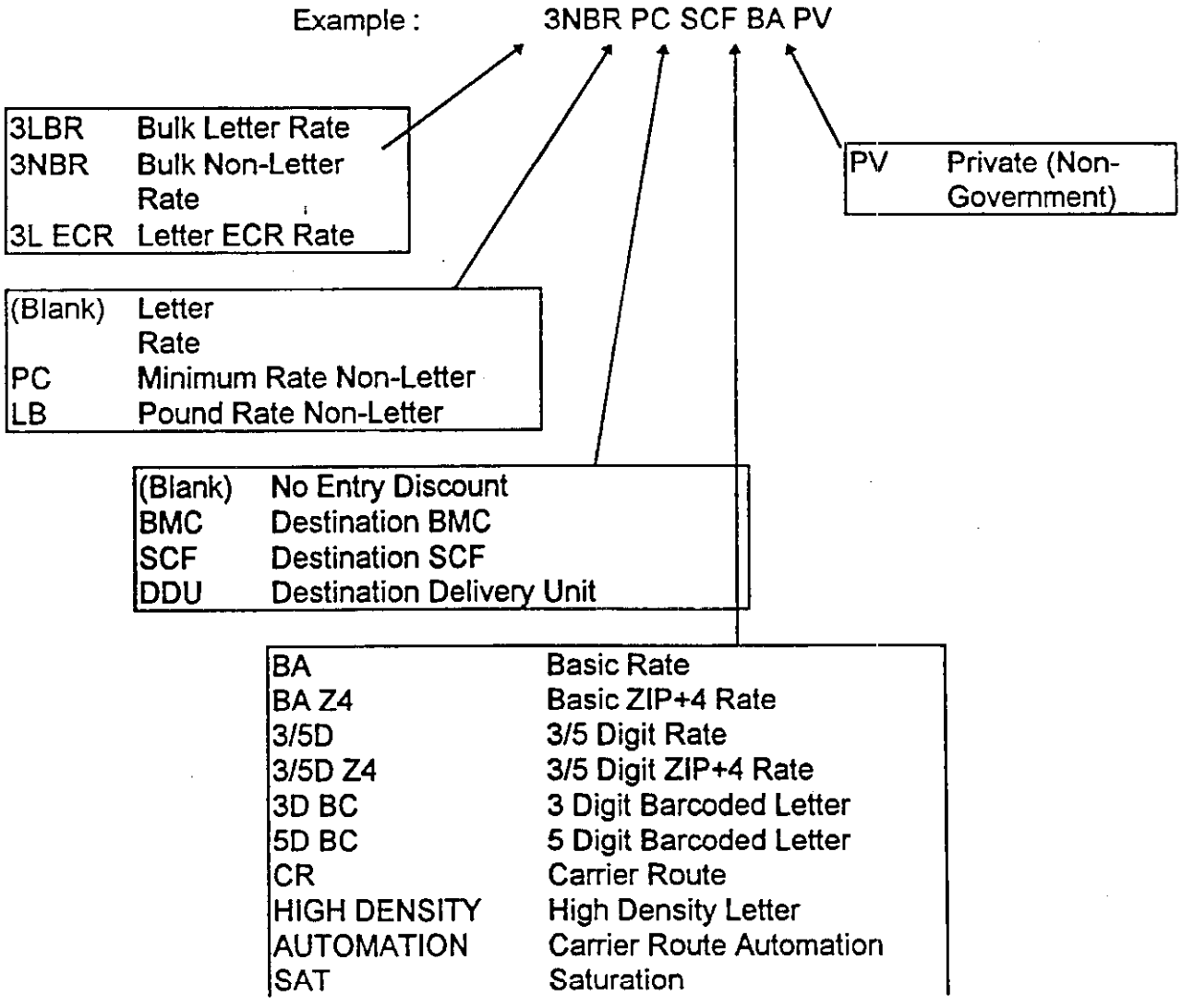
digit has the following coding: 1 = basic, 2 = basic barcoded, 3 = 3/5-digit, 4 = 3/5-digit barcoded, 5 = carrier route, 6 = high density, and 7 = saturation. Column A is a three digit code, the first digit is Column H, the second digit indicate entry discount (1 = no discount, 2 = DBMC discount, 3 = DSCF discount, 4 = DDU discount), and the third digit indicates subclass (1 = basic and 3/5-digit, 2 = carrier route, high density, and saturation).

Coding Scheme for Column G:



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FLAT BA Z4 BC	Basic Barcoded Flats
FLATS 3/5D Z4 BC	3/5 Digit Barcoded Flats
125	High Density Non-Letter

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b. Column A has the same coding as Column D of sheet "Data" as explained in part (a) of this interrogatory.

Column B has the same coding as Column F of sheet "Data".

Column C has the same coding as Column H of sheet "Data".

Columns D through S contain weight (in pounds) of mail by weight increments 1 to 16 ounces respectively.

Column T contains pieces.

Column U contains weight in pounds.

Column V contains revenue in dollars.

The source of the data in columns D through V is the output of program "est3rd_w.f" as described at page A15 of Library Reference H-108, specifically the file "est3rd_w.csv".

c. Column A has the same coding as Column F of sheet "Data".

Column B has the same coding as Column H of sheet "Data".

Columns C through R contain pieces of mail by weight increments 1 to 16 ounces respectively.

Column S contains pieces.

Column T contains weight in pounds.

Column U contains revenue in dollars.

The source of the data in columns C through U is the output of program "est3rd.f" as described at page A14 of Library Reference H-108, specifically the file "est3rd.csv".

AMMA/USPS-T-28-8

The following questions refer to the densities used to compute the cubic feet of mail in Table 3 of Exhibit K (formerly LR-H-108).

a. Please confirm that the density used for all Standard (A) letters, regardless of subclass, was 28.4219 pounds per cubic foot and that this density was the average for all "Third Class Bulk Regular Letters" from MC95-1: LR-MCR-13. If you cannot confirm please provide to correct value(s) and source(s).

b. Please confirm that the density used for all Standard (A) flats, regardless of subclass, was 20.6526 pounds per cubic foot and that this density was the average for all "Third Class Bulk Regular Flats" from MC95-1: LR-MCR-13. If you cannot confirm, please provide the correct value(s) and source(s).

c. Please confirm that the density used for Standard (A) ECR parcels is 4.4 pounds per cubic foot and was taken from MC95-1: LR-MCR-13. If you cannot confirm, please provide the correct value and source.

d. Please confirm that the density used for Standard (A) Nonprofit ECR parcels is 11.03 pounds per cubic foot and was taken from MC95-1: LR-MCR-13. If you cannot confirm, please provide the correct value and source.

e. Please confirm that the density used for Regular Non-Carrier Route parcels is 8.18 pounds per cubic foot and was taken from MC95-1: LR-MCR-13. If you cannot confirm, please provide the correct value and source.

f. Please confirm that the density used for Nonprofit Non-Carrier Route parcels is 13.36 pounds per cubic foot and was taken from MC95-1: LR-MCR-13. If you cannot confirm, please provide the correct value and source.

g. Please provide the standard errors for each of the density estimates shown in parts a through f.

RESPONSE

a. Confirmed.

b. Confirmed.

c. The density you cite is correct, but the source is LR-PCR-38, Appendix C, Table C-1.

d. The density you cite is correct, but the source is LR-PCR-38, Appendix C, Table C-1. This data was originally left off Table C-1, and is being attached for your convenience.

e. The density you cite is correct, but the source is LR-PCR-38, Appendix C, Table C-1.

f. The density you cite is correct, but the source is LR-PCR-38, Appendix C, Table C-1. This data was originally left off Table C-1, and is being attached for your convenience.

g. These numbers are not available.

ATTACHMENT TO RESPONSE TO AMMA/USPS-T28-8

Table C-1
Third-Class Parcel Characteristics Study
Average Weight and Average Cube by Subclass

	Rate Category	IPP Machinable	IPP Non-machinable	Parcel Machinable	Parcel Outside	Total
Pieces	Bulk Reg CRT	332,293	4,315,512	0	0	4,647,805
	Bulk Reg Other	6,122,312	22,790,532	35,231,517	9,606	64,153,967
	NP CRT	3,173	3,837	0	0	7,010
	NP Other	23,840	692,747	694,544	39,091	1,450,222
	Total Bulk 3C					70,259,004
Weight (pounds)	Bulk Reg CRT	47,628	607,037	0	0	654,865
	Bulk Reg Other	2,347,715	5,387,507	23,468,088	6,472	31,209,782
	NP CRT	1,196	1,489	0	0	2,685
	NP Other	9,613	250,847	483,160	11,336	754,956
						32,622,288
Cube (inch3)	Bulk Reg CRT	12,305,720	244,924,839	0	0	257,230,559
	Bulk Reg Other	552,562,275	1,424,744,955	4,611,017,833	1,883,677	6,590,208,740
	NP CRT	190,394	230,244	0	0	420,638
	NP Other	562,174	33,376,536	55,158,815	8,540,693	97,638,218
	Total Bulk 3C					6,945,498,156
Avg Weight (ounces)	Bulk Reg CRT	2.30	2.25			2.25
	Bulk Reg Other	6.14	3.78	10.66	10.78	7.78
	NP CRT	6.03	6.21			6.13
	NP Other	6.45	5.79	11.13	4.64	8.33
	Total Bulk 3C					7.43
Avg Density (lbs/ft3)	Bulk Reg CRT	6.72	4.28			4.40
	Bulk Reg Other	7.34	6.53	8.79	5.94	8.18
	NP CRT	10.85	11.18			11.03
	NP Other	29.55	12.99	15.14	2.29	13.36
	Total Bulk 3C					8.12

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
RESPONSE TO INTERROGATORIES OF THE
ADVERTISING MAIL MARKETING ASSOCIATION

AMMA/USPS-T-28-9

Please confirm that MC95-1: LR-MCR-13 (Supplement 1) estimated the average density for parcels in "Third Class Bulk Regular" as 14.9254 pounds per cubic foot. If you cannot confirm please provide the correct information.

RESPONSE

Confirmed.

AMMA/USPS-T-28-10

Please describe in detail the design and execution of the sampling study that developed densities in MC97-2: LR-PCR-38, including but not limited to:

a. The study objectives;

b. The universe of study;

c. The frame;

d. Stratification;

e. Sample size by stratum;

f. The assumed standard deviations of the variables and desired reliability of the estimates that were used in determining the sample size(s);

g. Who designed and carried out the study; and,

h. The period of time over which the observations were taken.

RESPONSE

Please refer to LR-PCR-38, Appendix C and LR-PCR-53 (which was provided in response to RIAA/USPS-T7-9 in Docket No. MC97-2). The study was designed by myself in coordination with experts from Christensen Associates and other Postal Service personnel. Field postal employees carried out the study after training teleconferences conducted by myself, another member of Product Cost Studies, and Christensen staff members. Christensen collected the results and put them into their current electronic format. Additional data relating to question (e) is attached.

ATTACHMENT TO RESPONSE TO AMMA/USPS-T28-10

Parcel Characteristics Study: Sample Size by Stratum

Strata	Description of Offices	Universe Size (No. of Offices)	Sample Size (No. of Offices)	Universe Volume	Sample Volume
1	Certainty	6	6	174,029,839	174,029,839
2	Big - Non-Identical	8	3	59,598,887	31,137,331
3	Big - Identical	19	12	142,150,868	104,934,577
4	Small - Non-Identical 5-18	29	9	100,486,357	30,288,977
5	Small - Identical 5-18	62	11	189,155,419	38,747,484
6	Small - Non-Identical 19-20	60	2	20,429,900	3,779,620
7	Small - Identical 19-29	755	6	64,402,186	4,852,588
Total		939	49	750,253,456	387,768,416

AMMA/USPS-T-28-11

Please explain why you used the densities from MC97-2: LR-PCR-38 for parcels and the densities from MC95-1: LR-MCR-13 for letters and flats.

RESPONSE

The purpose and intention of LR-MCR-13 was to collect density information for letters and flats to support transportation cost allocation. Parcel data was only provided as a specific response to OCA/USPS-T8-8(b) in Docket No. MC95-1. While the frequency of samples was 462 for flats and 756 for letters, it was only 42 for parcels. I believed the accuracy of our estimates could be improved by collecting density data as part of our parcel characteristics study where analysis of parcels was both the purpose and the intent. In the study described in LR-PCR-38, detailed characteristic information was collected on 15,859 Bulk Standard Mail (A) parcels from 4,624 mailings. Additionally, the study described in LR-PCR-38 was carefully designed and stratified to get a nationally representative sample of Bulk Standard Mail (A) parcels in particular (refer to Appendix C of LR-PCR-38 for a description of the statistical details). Please also see my response to a similar question in the transcript of my oral cross examination, Volume 5, page 2335, lines 1-10 (as corrected).

made would result in a lower density for parcels and a larger cost difference between flats and parcels in Bulk Standard Mail (A).

e. No.

f. LR-MCR-13 calculated density by weighing a mail container of known size and not looking at individual pieces. Therefore no "height/width aspect factor" was used.

AMMA/USPS-T-28-12

The following questions apply to MC97-2: LR-PCR-38, referenced as the source of the densities used in Table 3 of Exhibit K.

a. Please confirm that the densities of parcels in Standard (A) ECR and NonCarrier come from EXCEL worksheet Pchar3c.xls: Girth. If you cannot confirm, please provide to correct information.

b. Please provide identification and description for each code used in columns A and B, lines 27 through 54 of Pchar3c.xls: Girth.

c. Please define the "Height/Width Aspect Factor" used to compute densities and the source of its value, "0.148."

d. Please provide a verbal description of the logic used in the computation of densities using the '"Height/Width Aspect Factor."

e. Was a "Height/Width Aspect Factor" used in estimating the densities of flats and/or letters in MC95-1: LR-MCR-13.

f. If your answer to part e is no, please explain why one study used this factor and the other did not.

RESPONSE

a. Confirmed that they are shown both there and in the hard-copy version of LR-PCR-38, page C-3.

b. In column A, "1" means Carrier Route, "2" means Other, "3" means Nonprofit Carrier Route, "4" means Nonprofit Other. In column B, "1" means cubic volume calculated by multiplying length*width*height, "2" means cubic volume calculated by use of extremely conservative height-width aspect factor.

c. For pieces that were rectangular, length, width, and height were recorded. For pieces that were not rectangular, survey takers were asked to measure the length and the girth (the distance around) of the parcel. For example, say we have a piece with a measured length of 10 inches with a girth of 20 inches. That piece could have a width of 5 inches and a height of 5 inches (girth = 2*width + 2*height). This assumption would also result in the highest possible estimate of cubic volume (250 cubic inches) for that piece and also cause the ~~highest~~ lowest possible density estimate. This piece would have a "height-width aspect factor" of one. Alternately, that piece could have a height of only .38 inches and a width of 9.62 inches. This very flat piece would have a volume of about 37 cubic inches. Dividing 37 by 250 results in the "height-width aspect factor" of .148 which was used in the analysis.

d. The height-width aspect factor was used to estimate cubic volume for pieces that had only length and girth recorded. The majority (82 percent) had length, width, and height recorded so no aspect factor was used and the cubic volume was calculated directly. The aspect factor that we had to pick for pieces with no height recorded ranged from .148 up to a maximum of 1. While I believe the true aspect factor actually lies somewhere between .148 and 1, I took the most conservative approach available to me which would result in the highest parcel density. Any higher assumption about the aspect factor than the one that I

made would result in a lower density for parcels and a larger cost difference between flats and parcels in Bulk Standard Mail (A).

e. No.

f. LR-MCR-13 calculated density by weighing a mail container of known size and not looking at individual pieces. Therefore no "height/width aspect factor" was used.

U.S. POSTAL SERVICE WITNESS CHARLES L. CRUM
RESPONSE TO INTERROGATORIES OF THE
ADVERTISING MAIL MARKETING ASSOCIATION

AMMA/USPS-T-28-13

Please provide the reason(s) why the study design in MC95-1: LR-MCR-13 was not repeated when developing the data for Exhibit K.

RESPONSE

I was trying to develop an understanding of the characteristics of Standard Mail (A) (then third class) parcels in addition to calculating their density. LR-MCR-13 only calculated density. Please refer to the transcript of my oral cross examination, Volume 5, page 2337, lines 9-12. Please also refer to my response to AMMA/USPS-T28-11.

AMMA/USPS-T-28-14

Please provide the reason(s) why the study design in MC97-2: LR-PCR-38 Appendix C was not repeated when developing the data for Exhibit K.

RESPONSE

Please see the transcript of my oral cross examination, Volume 5, page 2337, lines 13-18.

NDMS/USPS-T28-27.

Please refer to Table 7 of Exhibit K, incorporated into your testimony on October 1, 1997.

a. Your 'Weight by Entry Discount' data identifies Appendix A as the source. Please identify the document (i.e., Appendix A to what document), page number, and line number where these data can be found, or explain how they can be calculated.

b. Please provide volumes by entry discount by shape, corresponding to your "Weight by Entry Discount" by shape data in Table 7, identifying the source of these data.

RESPONSE

a. I inadvertently failed to change the reference when I moved Table 7 into my testimony. Appendix A is contained in Library Reference H-108. I have attached a copy of the subject page for your convenience.

b. The requested information is attached.

ATTACHMENT TO RESPONSE TO NDMS/USPS-T28-27(

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Table A-1
FY 1996 Standard Mail (A)
Weight by Entry Discount

	Uncontrolled		Controlled		Total Regular and Nonprofit
	Regular	Nonprofit	Regular	Nonprofit	
Other					
Other Letter - No Entry	708,216	281,225	712,294	271,778	
Other Letter - DBMC	371,402	46,441	373,541	46,814	
Other Letter - DSCF	90,930	44,129	91,454	42,646	
Other Letter - DDU	-	-	-	-	
Other Flat - No Entry	1,046,770	194,880	1,052,798	188,334	
Other Flat - DBMC	841,999	30,696	846,848	29,865	
Other Flat - DSCF	485,455	34,442	486,251	33,285	
Other Flat - DDU	-	-	-	-	
Other Parcel - No Entry	344,110	14,254	346,091	13,775	
Other Parcel - DBMC	103,621	2,004	104,418	1,938	
Other Parcel - DSCF	32,959	1,237	33,149	1,195	
Other Parcel - DDU	-	-	-	-	
Carrier Route					
Carrier Route Letter - No Entry	130,587	29,481	136,313	28,231	
Carrier Route Letter - DBMC	321,019	33,257	335,094	31,847	
Carrier Route Letter - DSCF	342,326	36,645	357,335	35,091	
Carrier Route Letter - DDU	33,154	10,402	34,607	9,961	
Carrier Route Flat - No Entry	150,426	18,003	157,022	17,240	
Carrier Route Flat - DBMC	489,400	16,860	510,857	16,146	
Carrier Route Flat - DSCF	1,537,968	43,215	1,605,398	41,383	
Carrier Route Flat - DDU	922,325	8,396	962,762	8,040	
Carrier Route Parcel - No Entry	5,262	141	5,492	135	
Carrier Route Parcel - DBMC	1,632	0	1,703	0	
Carrier Route Parcel - DSCF	2,640	99	2,756	95	
Carrier Route Parcel - DDU	1,990	32	2,078	30	
Total					
Letter - No Entry			848,607	300,010	1,148,617
Letter - DBMC			708,635	78,660	787,295
Letter - DSCF			448,789	77,738	526,527
Letter - DDU			34,607	9,961	44,568
Flat - No Entry			1,209,819	205,574	1,415,393
Flat - DBMC			1,357,705	45,811	1,403,515
Flat - DSCF			2,093,648	74,668	2,168,316
Flat - DDU			962,762	8,040	970,803
Parcel - No Entry			351,584	13,910	365,493
Parcel - DBMC			106,122	1,936	108,058
Parcel - DSCF			35,905	1,290	37,195
Parcel - DDU			2,078	30	2,108

ATTACHMENT TO RESPONSE TO NDMS/USPS-T28-27(b)

FY 1996 Standard Mail (A)
Pieces by Entry Discount

	Uncontrolled		Controlled		Total
	Regular	Nonprofit	Regular	Nonprofit	Regular and Nonprofit
Other					
Other Letter - No Entry	12,380,284	5,781,034	12,307,038	5,586,849	
Other Letter - DBMC	4,846,166	839,710	4,813,596	908,145	
Other Letter - DSCF	1,967,951	1,233,850	1,954,729	1,192,405	
Other Letter - DDU	-	-	-	-	
Other Flat - No Entry	4,777,189	1,178,716	4,745,093	1,139,123	
Other Flat - DBMC	3,602,856	200,332	3,578,650	193,603	
Other Flat - DSCF	1,894,698	246,253	1,881,988	237,982	
Other Flat - DDU	-	-	-	-	
Other Parcel - No Entry	655,569	37,789	651,154	36,520	
Other Parcel - DBMC	155,409	3,522	154,365	3,403	
Other Parcel - DSCF	64,347	2,522	63,914	2,437	
Other Parcel - DDU	-	-	-	-	
Carrier Route					
Carrier Route Letter - No Entry	2,705,783	621,060	2,713,255	594,729	
Carrier Route Letter - DBMC	3,989,251	749,088	4,000,282	717,330	
Carrier Route Letter - DSCF	5,362,854	790,430	5,367,755	756,919	
Carrier Route Letter - DDU	724,861	235,419	726,866	225,438	
Carrier Route Flat - No Entry	998,927	146,874	1,001,689	140,647	
Carrier Route Flat - DBMC	2,566,191	123,051	2,573,287	117,835	
Carrier Route Flat - DSCF	7,858,150	291,634	7,879,878	279,270	
Carrier Route Flat - DDU	4,834,884	78,383	4,848,252	75,060	
Carrier Route Parcel - No Entry	25,716	624	25,787	597	
Carrier Route Parcel - DBMC	10,574	0	10,604	0	
Carrier Route Parcel - DSCF	21,201	569	21,259	545	
Carrier Route Parcel - DDU	11,782	258	11,814	248	
Total					
Letter - No Entry			15,020,302	6,181,578	21,201,880
Letter - DBMC			8,813,878	1,625,475	10,439,353
Letter - DSCF			7,322,484	1,948,324	9,271,808
Letter - DDU			726,866	225,438	952,304
Flat - No Entry			5,746,782	1,279,770	7,026,552
Flat - DBMC			6,151,937	311,437	6,463,374
Flat - DSCF			9,761,846	517,252	10,279,097
Flat - DDU			4,848,252	75,060	4,923,312
Parcel - No Entry			676,941	37,117	714,058
Parcel - DBMC			164,969	3,403	168,372
Parcel - DSCF			85,174	2,982	88,155
Parcel - DDU			11,814	248	12,062

NDMS/USPS-T28-28.

Please refer to Tables 3 and 7 of Exhibit K, recently incorporated into your testimony.

a. Table 3 of Exhibit K identifies the cost of the 1996 average Bulk Standard Mail (A) letter as 8.0 cents; flat as 11.3 cents; and IPPs and parcels as 51.6 cents per piece. Table 7, part 6 of Exhibit K identifies the average cost avoidance through presortation of a Bulk Standard Mail (A) flat as 13.5 cents per piece. Please confirm that, according to your testimony, the **average** flat, through presortation alone, avoids more than half of the costs it would otherwise incur *(i.e.,* if it received no presortation). If you do not confirm, please explain.

d. Please confirm that the presort cost avoidances in Table 7 are drawn from the 'Flats or Nonletters' data from page 2 of USPS-29C.

h. Table 7 reports a saturation presort cost avoidance of $0.202025 for flats and parcels. Please confirm that the equivalent saturation cost avoidance for Standard A letters, drawn from the "Letters" data from page 2 of USPS-29C, would be $.08992. If you do not confirm, please explain.

RESPONSE

a. The numbers I use to estimate presortation savings are actually "Regular Presort" (non-automation) "Flats or Nonletters". You have accurately stated the numbers from my testimony.

d. Confirmed.

h. While this question does not relate to my testimony which is intended to show the cost difference between parcels and flats, I have done the calculation you requested. I get $.089040. This can be repeated by subtracting the "Basic Presort Letters" numbers from the "Saturation" numbers on pages 2 and 4 of USPS-29C and weighting the results by the volume of Commercial and Nonprofit Rate Standard Mail

(A) listed in Tables 1 and 2 of Exhibit K of my testimony. Please also note that witness Daniel filed errata to USPS-29C on October 1, 1997.

NDMS/USPS-T28-29.

Exhibit K contains Table 3B(1) "FY 1996 Bulk Standard Mail (A) Regular Costs by Shape," and Table 3A(1) "FY 1996 Bulk Standard Mail (A) Enhanced Carrier Route Costs by Shape." Table 3B(1) identifies the costs of Standard A Regular parcels as 51.3 cents per piece, while the attributable costs of Standard A Regular flats are 18.2 cents per piece. Table 3A(1) identifies the costs of Standard A ECR parcels as 45.5 cents per piece, while the attributable costs of Standard A ECR flats are 6.4 cents per piece.

a. Please confirm that the average ECR flat avoids 65 percent of the costs incurred by the average Standard A Regular flat by virtue of greater presortation and dropship entry? If you do not confirm, or if you confirm in part, please explain your answer.

b. Please confirm that the average ECR parcel avoids 11 percent of the costs incurred by the average Standard A Regular parcel by virtue of greater presortation and dropship entry? If you do not confirm, or if you confirm in part, please explain your answer.

c. These tables show that the average Standard A Regular parcel incurs greater transportation costs (C.S. 14) than the average Standard A ECR parcel: 7.65 cents per piece compared to 0.99 cents per piece.
   (i) Do these figures indicate that, by virtue of greater presortation and dropship entry, the average Standard A ECR parcel avoids 6.66 cents per piece of the transportation costs incurred by the average Standard A Regular parcel?
   (ii) To what extent is this result caused by differences in weight/cube?
   (iii) To what extent is this result caused by differences in entry profile?

RESPONSE

a. Not confirmed. The cost difference between ECR flats and Regular flats could be caused by many things, two of which may very well be increased dropship and presortation for ECR flats relative to Regular flats.

b. Not confirmed. The cost difference between ECR parcels and Regular parcels could be caused by many things, two of which may indeed be increased dropship and presortation for ECR parcels relative to Regular parcels.

c. (i) No. Presortation should have no impact on transportation costs while dropshipment should. There are also other factors that might have an impact including the cubic volume of the piece. The estimated average cubic volume of an ECR parcel is less than the average cubic volume of a Regular parcel. Please see Table 3A(1) and Table 3B(1).

(ii) I have not specifically investigated this issue. Data to help estimate this could be found by looking at the rows "Cube of Mail" and "Volume of Mail" in the tables referenced in (i) above.

(iii) I have not specifically investigated this issue. Data to help estimate this could be found in Table A-1 which was provided for your convenience in response to 27(a).

NDMS/USPS-T28-31

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A (1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Mail Processing Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	10,154	14.62	2.77
Regular	252,236	29.01	8.90
Nonprofit			
ECR	510	36.72	3.06
Regular	15,693	37.05	6.40

a. Please confirm that the data shown above are correct. If not confirmed, please provide appropriate corrections.

RESPONSE

a. Confirmed, except "volume variable" needs to be used in place of the term "attributable". Please see the testimony of witness Alexandrovich (USPS-T-5, starting at page 2).

NDMS/USPS-T-28-32.

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable City Delivery Carrier Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	19,192	27.63	2.77
Regular	84,470	9.72	8.90
Nonprofit			
ECR	1,315	94.67	3.06
Regular	8,425	19.89	6.40

a. Please confirm that the data shown above are correct. If not confirmed, please provide appropriate corrections.

RESPONSE

a. Confirmed, except "volume variable" needs to be used in place of the term "attributable". Please see the testimony of witness Alexandrovich (USPS-T-5, starting at page 2).

NDMS/USPS-T28-33.

The following data for parcels are taken, or computed from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable City Delivery Direct Labor Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	6,286	9.05	2.77
Regular	13,439	1.55	8.90
Nonprofit			
ECR	49	3.53	3.06
Regular	773	1.82	6.40

a. Please confirm that the data shown above are correct. If not confirmed, please provide appropriate corrections.

RESPONSE

a. Confirmed, except "volume variable" needs to be used in place of the term "attributable" and "City Carrier In-Office Direct Labor" needs to be used in place of "City Delivery Direct Labor." Also, please see the testimony of witness Alexandrovich (USPS-T-5, starting at page 2).

NDMS/USPS-T28-34

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Rural Deliver Carrier Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	559	0.80	2.77
Regular	25,173	2.90	8.90
Nonprofit			
ECR	66	4.75	3.06
Regular	1,017	2.40	6.40

a. Please confirm that the data shown above are correct. If not confirmed, please provide appropriate corrections.

RESPONSE

a. Confirmed, except "volume variable" needs to be used in place of the term "attributable". Please see the testimony of witness Alexandrovich (USPS-T-5, starting at page 2).

NDMS/USPS-T28-36

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Elemental Load Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	5,105	7.35	2.77
Regular	38,808	4.46	8.90
Nonprofit			
ECR	814	58.60	3.06
Regular	4,610	10.88	6.40

a. Please confirm that the data shown above are correct. If not confirmed, please provide appropriate corrections.

RESPONSE

a. Confirmed, except "volume variable" needs to be used in place of the term "attributable". Please see the testimony of witness Alexandrovich (USPS-T-5, starting at page 2).

NDMS/USPS-T28-37

Please refer to your Exhibit K, Table 5, Construction of FY 1996 Elemental Load Key.

a. Is the reference "W/S 7.0.6.6" to a worksheet filed as a part of your original testimony? If not, please provide a complete citation to where this reference can be found.

b. Please explain the source of the entries under column 3, parcels. That is, are the numbers shown in this column based on a sample? If so, please

(i) indicate where a description of the data collection can be found;

(ii) discuss how the data collection distinguishes between parcels in the different Standard Mail (A) subclasses; and

(iii) discuss how the data collected can result in such widely differing unit costs as those discussed in NDMS/USPS-T28-36.

RESPONSE

a. No. "W/S 7.0.6.6" refers to the testimony of Base Year witness Alexandrovich (USPS-T-5, Workpaper B, Worksheet 7.0.6.6).

b. The numbers I use in my testimony were taken from the source described in my response to (a) above.

NDMS/USPS-T28-38

a. Please confirm that the vast majority of purchased transportation costs attributed to Standard A Mail consists of highway transportation costs. Please explain any nonconfirmation.
b. Please confirm that highway transportation costs (i) are incurred on the basis of the cubic volume of mail to be transported, and (ii) highway transportation costs are distributed to the classes and subclasses of mail according to cube. Please explain fully any nonconfirmation.
c. Please refer to Exhibit K, Table 7, part 2 and confirm that the cost avoidance due to dropshipment of Standard A mail (shown in row 3 below) is composed of the two components shown in rows 1 and 2. If you do not confirm please supply the correct data.

Cost Avoidance From Dropshipment, $/lb.

	BMC	SCF	DDU
Transporation Costs	0.0769	0.0906	0.1108
Nontransportation Costs	0.0135	0.0199	0.0271
Total	0.0904	0.1105	0.1379

RESPONSE

a. Highway Transportation constitutes 68.7 percent of the volume variable Purchased Transportation (Cost Segment 14) costs allocated to Bulk Standard Mail (A).

b. For the purposes of my analysis, Highway Transportation costs are allocated to shape based on the estimated cubic volume in that shape.

c. Confirmed.

MR. REITER: I will do that. I also have one other thing I would like to give to the reporter for the record.

The other day, we filed a reformatted version of Table 7 in the witness's Exhibit K. That already was included with his testimony that went into the record at the time he was here previously but some of the information was truncated in the version that was printed out. So I have a proper version here which probably should be a part of the record. There are no substantive changes in this, however.

CHAIRMAN GLEIMAN: Witness Crum, are you familiar with Table 7 in its untruncated form?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: And I assume that that is your work, that you adopt it?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: Okay.

Mr. Reiter, if you would also provide copies of that to the reporter, I will appreciate it, and we will ask the reporter to include that material into the record and to transcribe it also.

[Exhibit K, Table 7, USPS-T-28, was received into evidence and transcribed into the record.]

Table 7
Calculation of Cost Difference Due to Differences in Presorting and Drop Shipment
FY 1996 Bulk Standard Mail (A)

1) Weight by Entry Discount (Appendix A)

	None	BMC	SCF	DDU	Total
Flats	1,415,393	1,403,515	2,168,316	970,803	5,958,027
Parcels	365,493	108,058	37,195	2,108	512,855

2) Cost Avoidance $/lb (LR-H-111)

None	BMC	SCF	DDU
0	0.0904	0.1105	0.1379

3) Avoided Costs (= (1) * (2))

	None	BMC	SCF	DDU	Total	Average Avoided Cost/Piece	
Flats	0	126,878	239,599	133,874	500,350	0.017	(3a) = (3) total / (4) total
Parcels	0	9,768	4,110	291	14,169	0.014	(3b) = (3) total / (4) total

4) Pieces by Presort Level (Table 1 and Table 2)

	Basic	3/5 Digit	Carrier	125 Walk	Saturation	Total
Flats	1,740,525	10,035,893	8,721,423	746,451	7,448,043	28,692,335
Parcels	284,711	627,083	55,587	1,815	13,451	982,647

5) Presort Cost Avoidances $ / pc (Exhibit USPS-T-29C)

Basic	3/5 Digit	Carrier	125 Walk	Saturation
0	0.082227	0.160176	0.18690	0.202025

Table 7
Calculation of Cost Difference Due to Differences in Presorting and Drop Shipment
FY 1996 Bulk Standard Mail (A)

6) Avoided Costs (= (4) * (5))

	Basic	3/5 Digit	Carrier	125 Walk	Saturation	Total	Average Avoided Cost/ Piece	
Flats	0	825,221	1,396,963	139,514	1,504,691	3,866,389	0.135	(6a) = (6) total / (4) total
Parcels	0	51,563	8,904	339	2,717	63,524	0.065	(6b) = (6) total / (4) total

7) Cost Difference Due to Differences in Entry and Presort Profile

Flats

7a)	0.003	$ / piece saved due to entry profile relative to parcels. (= (3a) - (3b))
7b)	0.070	$ / piece saved due to presort profile relative to parcels. (= (6a) - (6b))
7c)	0.073	$ / piece of difference in average costs of flats and parcels are explained by differences in presorting and entry profiles. (= (7a) + (7b))

CHAIRMAN GLEIMAN: Does any participant have additional written cross-examination for Witness Crum?

MR. OLSON: Mr. Chairman, William Olson --

CHAIRMAN GLEIMAN: I'm sorry, Mr. Olson, I moved too fast there, I guess.

MR. OLSON: Actually, the reason that this wasn't designated is we got it about 3:00 yesterday so we would like to ask that this witness's responses to Interrogatories NDMS-USPS-T-28, 28-B, E through G, I and K, 29-K -- excuse me, 29-D and E, 31-B through G, 32-B through E, 33-B, 34-B through F, 35, 36-B through D, 39 and 40, which consist of the totality of those responses furnished to us yesterday afternoon, dated December 3, be also designated for the record.

CHAIRMAN GLEIMAN: Mr. Reporter, did you get that list of interrogatories? Okay, just wanted to make sure.

Mr. Crum, if these questions were asked of you today, would your answers be the same as those you provided yesterday afternoon in writing? Or which we received, let's say, yesterday afternoon.

THE WITNESS: Yes, they would. There is only one issue related to it looks like 39 and 40. I was informed this morning before I came over here that there was errata filed to Library Reference 111 that could possibly impact these numbers to a very small degree, so I just wanted to

make that comment.

Very -- again, I did not see the numbers. As I was leaving, I was notified that there was a very small change made to that within the last couple of days.

CHAIRMAN GLEIMAN: Mr. Olson, if you have no concerns based on the comments of the witness and you have some copies that we can give to the reporter, I will direct that the additional designated written cross-examination of the witness be incorporated into the record and transcribed at this point.

MR. OLSON: I have no problems with respect to that comment but I wonder if the witness might want to make the correction for the record I believe he started to make earlier with respect to was it number 35?

THE WITNESS: 35?

CHAIRMAN GLEIMAN: Before we do that, sir, 35, I lost track. I couldn't keep up with you as you were rattling off the numbers. 35 was in the package that you were --

MR. OLSON: Yes, sir.

THE WITNESS: I'm sorry, I didn't think 35 was in there. Yes, I would like to make that change.

CHAIRMAN GLEIMAN: Let's do that.

THE WITNESS: 35-A, the third line down on the second page to that response, the word "relatively" should

be inserted before "much," before the second "much." It should read, "and relatively much higher for city carriers."

CHAIRMAN GLEIMAN: Can we take a short break?

MR. OLSON: Sure.

[Recess.]

CHAIRMAN GLEIMAN: I think the reporter is about to receive the corrected copies of the additional designated written cross-examination, which I have already indicated or accepted into evidence and transcribed into the record at this point.

[Additional Designation of Written Cross-Examination of Charles L. Crum, USPS-T-28, was received into evidence and transcribed into the record.]

NDMS/USPS-T28-28.

Please refer to Tables 3 and 7 of Exhibit K, recently incorporated into your testimony.

b. Do you believe that Bulk Standard Mail (A) IPPs and parcels - by any level of presortation, alone - can avoid more than half of the costs they would otherwise incur (i.e., if they received no presortation). Please explain any answer that is not an unqualified affirmative.

e. If the attributable cost of the average Bulk Standard Mail (A) flat is 11.3 cents (Table 3), and the average cost avoidance through presortation of a Bulk Standard Mail (A) flat is 13.5 cents (Table 7, part 6) (and these mail processing costs reflect 0 percent dropshipping (see USPS-29C, n.2)), please confirm that the cost of a nonpresorted Bulk Standard Mail (A) flat would be 24.8 cents. If you do not confirm, please explain.

f. If the attributable cost of a nonpresorted Bulk Standard Mail (A) flat would be 24.8 cents, please explain how that flat can avoid 20.2 cents by saturation presortation, as you indicate at Table 7, part 5.

g. Table 7, at 6) Avoided Costs multiplies data from 4) Pieces by Presort Level by 5) Presort Cost Avoidances. The same cost avoidance ($/piece) is applied to both flat and parcel volumes to calculate part 6. Do you believe that Bulk Standard Mail (A) flats and parcels avoid identical amounts of attributable costs through dropshipment?

i. Please explain why the saturation presort cost avoidance for Standard A flats is more than twice the saturation cost avoidance for Standard A letters.

k. Please provide the equivalent data for all dropship entry cost avoidances reported in Table 7, in cents per piece. (See part 3 of Table 7)

RESPONSE

b. Please see Table 3B in Exhibit K of my testimony. Mail processing comprises about 56.5 percent of Bulk Standard Mail (A) non-carrier route parcel costs. Presortation alone should probably not impact costs other than mail processing. Mail processing includes numerous other costs in addition to piece distribution (for example platform operations - please refer to my response to DMA/USPS-T28-6). Many of those other types of costs would not be avoided by presortation alone. Therefore it is not clear to me that any level of presortation alone could result in costs less than half of what would be otherwise incurred.

e. Not confirmed. For example, your estimate is based on Regular Presort Flats or Nonletters and ignores Automation flats. Also, please refer to my response to (g) below. If your goal is to estimate the average unit cost of a nonpresorted Bulk Standard Mail (A) flat given the data in my testimony, however, this simple approach does seem basically logical.

f. I do not know exactly "how" a flat avoids 20.2 cents or how this is relevant to my testimony. Please refer to USPS-29C, page 2 for a discussion of cost estimates by presort level. Please also refer to USPS-T-26 for a discussion of volume variable mail processing costs for each rate category of flats within Standard Mail (A). Finally, please also refer to my response to 29(d)(iv).

g. Since the majority of estimated dropship savings are related to transportation and the majority of transportation is related to cubic volume and the average cubic volume of a parcel is higher than the average cubic volume of a flat, then probably not.

i. While I do not believe this question is related to my testimony and am not able to provide a definitive answer, my supposition is the following. Letters are very highly automated (please refer to USPS-T-4) and less expensive (please refer to USPS-T-29) to process than flats. Therefore, there are more costs available for saturation presort to avoid for flats than for letters.

k. I have not done the calculations that you request. Please refer to the attachment to my response to NDMS/USPS-T28-27(b) for the necessary data to answer your question. Be sure to use the "Controlled" total.

NDMS/USPS-T28-29.

Exhibit K contains Table 3B(1) "FY 1996 Bulk Standard Mail (A) Regular Costs by Shape," and Table 3A(1) "FY 1996 Bulk Standard Mail (A) Enhanced Carrier Route Costs by Shape." Table 3B(1) identifies the costs of Standard A Regular parcels as 51.3 cents per piece, while the attributable costs of Standard A Regular flats are 18.2 cents per piece. Table 3A(1) identifies the costs of Standard A ECR parcels as 45.5 cents per piece, while the attributable costs of Standard A ECR flats are 6.4 cents per piece.

d. These tables show that the average Standard A Regular parcel incurs greater mail processing costs (C.S. 3.1) than the average Standard A ECR parcel: 29.01 cents per piece compared to 14.62 cents per piece.
   (i) Please confirm that, by virtue of greater presortation and dropship entry, the average Standard A ECR parcel avoids 14.39 cents **per piece** of the mail processing costs incurred by the average Standard A Regular parcel? If you do not confirm, please explain your answer.
   (ii) Please confirm that, by virtue of greater presortation and dropship entry, the average ECR parcel avoids more than 20 cents **per piece** of the mail processing and transportation costs incurred by the average Standard A Regular parcel? If you do not confirm, please explain your answer.
   (iii) Please confirm that presortation and dropship entry of parcels results in greater cost avoidance to the Postal Service than presortation and dropship entry of flats and letters? If you do not confirm, please explain your answer.
   (iv) Do you feel that you have accurately identified in your testimony the effect of differences in the use of destination entry and presortation by Standard A flats and parcels? Please explain your answer.
   (v) If these figures indicate that the greater presortation and dropship entry provided to the average ECR parcel avoid more than 20 cents **per piece** of the mail processing and transportation costs incurred by the average Standard A Regular parcel, why is the overall difference between the costs incurred by average Standard A ECR parcel and the average Standard A Regular parcel less than 6 cents per piece?
   (vi) Did you notice this anomaly before you incorporated these data into your testimony?
   (vii) How reliable are the data in these tables, in your testimony?
   (viii) Did you examine the reliability of the attributable cost data from the IOCS and the Base Year CRA before you incorporated these data into your testimony? If so, how did you examine the reliability, and what conclusions did you draw?
   (ix) Did you examine the reliability of the volume data from the PERMIT and BRAVIS systems before you incorporated these data into your testimony?

If so, how did you examine the reliability, and what conclusions did you draw?

e. With respect to the data from Tables 3A(1) and 3B(1) in your testimony:

(i) Please explain why the average Standard A ECR flat incurs approximately one-third the costs incurred by the average Standard A Regular flat, while the Standard A ECR parcel incurs approximately nine-tenths of the costs incurred by the average Standard A Regular parcel.

(ii) Please explain why ECR preparation and delivery avoids 12 of 18 cents from the cost of the average Standard A flat, but only 6 of 51 cents from the cost of the average Standard A parcel.

RESPONSE

d. (i) Not confirmed. Please refer to my response to (b) above.

(ii) Not confirmed. Please refer to my response to (b) above.

(iii) Not confirmed. For dropship, please refer to my response to 28 (g) above. For presort, it is not completely clear to me that current presortation cost savings are substantially higher for parcels than for flats.

(iv) Please refer to my oral response at Tr. 5/2364, lines 2-5 as well as my response to (iii) above and 28 (b). The analysis in Table 7 is conservative in that it lowers the estimated cost difference between flats and parcels in Standard Mail (A). Were I to assume that, indeed, parcels save more than flats from dropshipping and presorting, the adjusted cost difference between flats and parcels in Standard Mail (A) would expand. The intention of my testimony has been to **conservatively** estimate the cost difference between flats and parcels in Standard Mail (A).

(v) I do not know why the cost difference between Standard Mail (A) Regular parcels and Standard Mail (A) ECR parcels is 5.8 cents.

(vi) I would not characterize the situation you describe as an anomaly. Please refer to my responses to (i) and (ii) above and e(ii) below.

(vii) I believe the data in my testimony are reliable.

(viii) I did not specifically question the reliability of the In-Office Cost System which is a standard Postal data system or the Base Year CRA (whose twin, the Fiscal Year CRA, is publicly audited each year). Please see the testimony of witness Degen for additional information on the In-Office Cost System and witness Alexandrovich for additional information on the Base Year CRA. I did review three previous years of data in my Table 3 analysis (which was submitted in response to NDMS/USPS-T28-18). Each year showed very large cost differences between Standard Mail (A) flats and parcels.

(ix) Almost two years ago, I called a meeting which included many of the leading volume experts within the Postal Service. I was told that PERMIT/BRAVIS produced the most reliable estimates for my purposes. Other known distribution keys were considered and produced similar results. It is important to note that the analysis of volumes used in my testimony produces a smaller cost difference between parcels and flats in Standard Mail (A) than any of the other alternatives considered. It is also important to note that, technically, I did not use PERMIT/BRAVIS volumes as such. I used the audited, official Revenue, Pieces, and Weight (RPW) data and used PERMIT/BRAVIS as a distribution key for shape purposes.

e. (i) I do not know. One possible explanation is that there are inherent characteristics related to parcels which make them more costly regardless of presort.

Another possibility is that there are physical characteristics of the mix of ECR parcels which are different than the mix for Regular parcels. There could also be issues specifically related to ECR parcels (such as detached address cards) that could help explain the results you see. ECR flats save substantial costs relative to Regular flats (please refer to USPS-29C, pages 1-6).

(ii) I do not know. Please refer to my response to (i) above.

NDMS/USPS-T28-31

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A (1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Mail Processing Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	10,154	14.62	2.77
Regular	252,236	29.01	8.90
Nonprofit			
ECR	510	36.72	3.06
Regular	15,693	37.05	6.40

b. Within Regular Rate, the unit mail processing cost for an ECR parcel (14.62 cents) is about half the unit cost for a 'Regular' parcel (29.01 cents).
   (i) Is this difference in mail processing cost explained by the fact that ECR parcels avoid a certain amount of mail processing and handling? If not, please explain.
   (ii) Which mail flow models presented in this docket (if any), are applicable to ECR or 'Regular" parcels and show explicitly the processing and handling avoided by ECR parcels?

c. Within Nonprofit, the unit mail processing cost for ECR parcels (36.72 cents) is almost the same as the unit cost for 'Regular' parcels (37.05 cents). Please explain why the unit mail processing cost for Nonprofit ECR parcels is not significantly less than the unit cost of Nonprofit 'Regular' parcels.

d. (i) Why is the unit mail processing cost for Nonprofit ECR parcels (36.72 cents) 2.5 times the unit cost for Regular Rate ECR parcels (14.62 cents)?
   (ii) What processing and handling steps explain the 22. 10 cent difference in unit cost?
   (iii) What is the confidence interval for the two unit cost estimates?
   (iv) How many IOCS tallies support the cost estimates for Nonprofit and Regular Rate ECR parcels?

e. The average weight of a Nonprofit ECR parcel (3.06 ounces) is slightly heavier (by 0.29 ounces) than the average weight of a Regular Rate ECR parcel (2.77 ounces). Does the weight difference help explain the 22. 10 cent mail processing cost difference? Please explain your answer.

f. The unit mail processing cost for a Nonprofit "Regular" parcel (37.05 cents) is 8 cents more than the unit cost for a Regular Rate parcel (29.01 cents).
   (i) What steps in handling explain this 8-cent difference in unit cost?

(ii) Do nonprofit parcels have a different, more expensive-to-handle shape than Regular Rate parcels?
(iii) What is the 95 percent level of confidence for the two unit cost estimates?
(iv) How many IOCS tallies support the mail processing cost estimates for Nonprofit and Regular Rate 'Regular" parcels?

g. Why does a lighter weight Nonprofit 'Regular' parcel (6.4 ounces) have a unit mail processing cost that is 8 cents higher than a heavier Regular Rate parcel (8.9 ounces)?

RESPONSE

b. (i) That certainly accounts for some portion of the difference. In addition, there could be a variety of other factors including, for example, the average size of ECR parcels relative to Regular parcels. Please also refer to my response to 29 (c)(i).

(ii) Please refer to my response to NDMS/USPS-T28-19.

c. Please refer to Table 3A(2) in Exhibit K of my testimony. The volume for Nonprofit ECR parcels is obviously very low relative to the other subclasses. One might expect unit cost fluctuations when volumes are of that level. I can not definitively vouch for the stability or one year accuracy of the results for Nonprofit ECR parcels in isolation particularly when they are broken out into even smaller pieces not specifically referred to in my testimony. The Nonprofit specific results were included separately only in response to intervenor requests and in the interest of providing a complete record. Please refer to DMA/USPS-T28-9. I fully and completely vouch for the results in Table 3 of Exhibit K which is what is used to support the surcharge.

d. (i)-(iii) Please refer to my response to (c) above.

(iv) Please refer to witness Degen's response to DMA/USPS-T28-10 (redirected from myself).

e. Please see my response to (c) above.

f. (i) I am unaware of any difference in processing steps that would explain the difference in unit costs.

(ii) The broad mix of the 869 million Regular (commercial rate, non-ECR) parcels could have a broad array of different average characteristics (physical, geographic, etc.) than the 42 million Nonprofit (nonprofit rate, non-ECR) parcels.

(iii) This is not available.

(iv) Please refer to witness Degen's response to DMA/USPS-T28-10 (redirected from myself).

g. Please refer to my response to f (ii) above.

NDMS/USPS-T-28-32.

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable City Delivery Carrier Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	19,192	27.63	2.77
Regular	84,470	9.72	8.90
Nonprofit			
ECR	1,315	94.67	3.06
Regular	8,425	19.89	6.40

b. Within Regular Rate, the unit delivery cost for a 'Regular' parcel (9.72 cents) is about one-third the unit delivery cost for an ECR parcel (27.63 cents), despite the fact that an ECR parcel (2.77 ounces) is only one-third the weight of a 'Regular' parcel (8.90 ounces). What factor(s) account for this difference of 17.91 cents in delivery cost? Please explain fully.

c. Within Nonprofit, the unit delivery cost for an ECR parcel (94.67 cents) is about five times the unit delivery cost of a Nonprofit "Regular" parcel (19.89 cents), even though the average weight of the ECR parcel (3.06 ounces) is less than half the average weight of the 'Regular" parcel (6.40 ounces).
   (i) Please identify and explain all factors that account for the 74.78 cent difference in unit cost.
   (ii) What is the 95 percent level of confidence for the unit cost estimates?

d. Why is the unit cost to deliver a Nonprofit ECR parcel (94.67 cents) over three times the unit cost to deliver a Regular Rate ECR parcel (27.63 cents)? Please explain fully.

e. To what extent do differences in weight account for differences in the unit delivery cost of Standard A parcels?

RESPONSE

b. I do not know. I did not conduct a study relating to each cost segment area with the intention of fully describing the noted "unit cost" results. However, based on my visits to delivery offices and discussions with carriers, carrier supervisors, and other

delivery personnel, the following might possibly account in part for the difference you note.

Regular parcels usually come in one at a time and are processed as part of the carrier's normal daily activities. ECR parcels can come in larger groups, and, thus can cause the carrier to deviate slightly from his/her normal routine, adding slightly to the resulting costs. Also, samples (which are generally associated with carrier route mailings) can require a detached label card. This card must be cased with the letters and flats while the parcel must also be prepared for delivery. This too could cause slightly higher costs for ECR parcels.

Additionally, there could be differences in average physical and/or location characteristics that might possibly have an impact. Finally, your "unit cost" calculation divides volume variable city carrier costs by total volume, not the volume carried by city carriers by subclass.

c.-d. Please see my response to NDMS/USPS-T28-31(c).

e. I have not studied the impact of weight on delivery costs for Standard Mail (A) parcels.

NDMS/USPS-T28-33.

The following data for parcels are taken, or computed from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable City Delivery Direct Labor Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	6,286	9.05	2.77
Regular	13,439	1.55	8.90
Nonprofit			
ECR	49	3.53	3.06
Regular	773	1.82	6.40

b. Within Regular Rate, the unit city delivery direct labor cost for an ECR parcel (9.05 cents) is almost six times the unit cost for a 'Regular' parcel (1.55 cents), and within Nonprofit, the direct labor unit cost for an ECR parcel (3.53 cents) is almost twice the unit cost for a 'Regular' parcel (1.82 cents). At the same time, the average weight of ECR parcels is less than half the average weight of 'Regular' parcels.
   (i) Please explain why city delivery direct labor cost is so much higher for ECR parcels than it is for 'Regular' parcels?
   (ii) What characteristics of Regular Rate ECR parcels cause them to incur a city delivery direct labor unit cost of 9.05 cents?
   (iii) What is the 95 percent level of confidence for the two unit cost estimates.
   (iv) How many IOCS tallies support the cost estimates for ECR and Regular parcels?

RESPONSE

b. (i) - (iii) Please see my response to 32(b) above.

(iv) Please refer to witness Degen's response to DMA/USPS-T28-10 (redirected from myself).

NDMS/USPS-T28-34

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Rural Deliver Carrier Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	559	0.80	2.77
Regular	25,173	2.90	8.90
Nonprofit			
ECR	66	4.75	3.06
Regular	1,017	2.40	6.40

b. Within Regular Rate, the unit rural delivery cost for a 'Regular' parcel (2.90 cents) is about three and one-half times the unit rural delivery cost for an ECR parcel (0. 80 cents). Does the fact that the weight of a 'Regular' parcel (8.90 ounces) is over three times the weight of an ECR parcel (2.77 ounces) account for the extraordinary difference in unit cost? What other factor(s) account for this difference of 2.10 cents in rural delivery cost? Please explain fully.

c. Within Nonprofit, the unit delivery cost for an ECR parcel (4.75 cents) is about two times the unit delivery cost of a Nonprofit 'Regular' parcel (2.40 cents), even though the average weight of the ECR parcel (3.06 ounces) is less than half the average weight of the 'Regular' parcel (6.40 ounces).
   (i) Please explain all factors that account for the 2.35 cent difference in unit cost.
   (ii) What is the level of confidence for the unit cost estimates?

d. Why is the unit cost for rural delivery of a Nonprofit ECR parcel (4.75 cents) almost six times the unit cost for rural delivery of a Regular Rate ECR parcel (0.80 cents)? Please explain fully.

e. Please explain the extent to which the wide-ranging differences in unit rural delivery cost are a result of 'real' factors associated with parcels, such as weight, difficult-to handle shapes, etc. If you made no attempt to investigate such wide-ranging differences, please explain why.

f. Please discuss the extent to which the wide-ranging differences in unit rural delivery cost are a result of data problems or possible inconsistencies in the way rural delivery costs are distributed to letters, flats and parcels in each rate category covered by your tables 3A(1&2) and 3B(1&2).

RESPONSE

b. Please see my response to 32(e) above. Your "unit cost" calculation divides *volume variable costs (by subclass)* by **total** *volume (by subclass). An appropriate unit* cost calculation would divide volume variable costs by the volume engaged in that activity (for example pieces carried by a rural carrier). I have not done attempted to investigate this because it is not necessary for the purposes of my testimony which is to show the cost difference between parcels and flats in Bulk Standard Mail (A). Please also refer to my response to 34(f) and 35(b) below.

c.-d. Please refer to my response to 31(c) and 34(b) above.

e. Please see my responses to 34(b) above and 34(f) below.

f. Please refer to my response to NDMS/USPS-T28-3. If there are any "problems", I believe that the "problem" would be an understatement of costs being allocated to parcels (and an overstatement of costs allocated to flats) with the use of the Rural Carrier Cost System methodology for my purposes. As discussed previously, my numbers are meant to be a conservative estimate of the cost differences between flats and parcels in Standard Mail (A).

NDMS/USPS-T28-35.

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Rural Delivery Unit Cost (cents)	City Delivery Unit Cost (cents)	Ratio City Delivery: Rural Delivery
Regular Rate			
ECR	0.80	9.05	11.3
Regular	2.90	1.55	0.5
Nonprofit			
ECR	4.75	3.53	0.7
Regular	2.40	1.82	0.8

a. The unit city delivery cost for an ECR parcel is more than 11 times the unit rural delivery cost for an ECR parcel. Conversely, the unit rural delivery cost for a 'Regular" parcel exceeds the unit city delivery cost for a 'Regular" parcel by a factor of two. The unit rural delivery unit cost of Nonprofit 'Regular" and ECR parcels are also higher than the corresponding unit city delivery costs. What factors explain why the unit city delivery cost for an ECR parcel is more than 11 times the unit rural delivery cost for an ECR parcel, while the unit city delivery cost for all other Standard A parcels are less than their unit rural delivery cost?

b. In view of these results, how much confidence do you have in these data on unit delivery cost?

RESPONSE

a. The "unit cost"(s) you are using here are the cost of a particular delivery segment (e.g. Rural) over the total volume of all parcels for that subclass. I do not believe such an analysis can lead to any explanative results. Parcels can be delivered by a rural carrier or a city carrier, but not both. That mix might be very different by subclass. Since my purpose is to estimate the total costs of flats and parcels, it does not really matter how they are delivered. The total costs and total volumes are as they are. Your implicit assumption is basically that each piece is getting both rural and city carrier costs. Let us just examine your first sentence about rural and city carrier ECR costs.

Perhaps within commercial rate, ECR parcels are very rarely delivered by rural carriers and are usually delivered by city carriers. The applicable volumes might be much lower for rural carriers and RELATIVELY much higher for city carriers. The true "unit cost" for rural carrier and city carrier delivered items might be identical. I do not know if this is indeed the case and it would not need be so for me to maintain complete belief in my numbers, but I think it points out why these questions concerning carrier unit costs provide no additional insight.

b. I believe "these results...on unit delivery cost" are basically meaningless for the reasons described above. Additionally, my testimony does not discuss the results of analyses related to finely broken out subcategories, but to the total cost difference between parcels and flats in Bulk Standard Mail (A). Finally, my analysis of Standard Mail (A) parcel city carrier costs is actually conservative. Please refer to my response to UPS/USPS-T28-11.

NDMS/USPS-T28-36

The following data for parcels are taken, or computed, from your Exhibit K, Tables 3A(1&2) and 3B(1&2) for Bulk Standard A Mail.

	Total Attributable Elemental Load Cost (000)	Unit Cost (cents)	Average Weight (ounces)
Regular Rate			
ECR	5,105	7.35	2.77
Regular	38,808	4.46	8.90
Nonprofit			
ECR	814	58.60	3.06
Regular	4,610	10.88	6.40

b. Within Regular Rate, the elemental load cost for an ECR parcel (7.35 cents) is 1.6 times the unit cost for a 'Regular' parcel (4.46 cents). Please explain why a lighter-weight ECR parcel has a higher elemental load cost than a 'Regular' parcel.

c. Within Nonprofit, the elemental load cost for an ECR parcel (58.60 cents) is over 5 times the unit cost for a 'Regular' parcel (10.88 cents). At the same time, the average weight of a Nonprofit ECR parcels is less than half the average weight of a Nonprofit 'Regular' parcel. Please explain why elemental load cost is so much higher for a Nonprofit ECR parcel than it is for a Nonprofit 'Regular' parcel. For example, what characteristics of a Nonprofit ECR parcel cause them to incur an average elemental load cost of 58.60 cents?

d. The elemental load cost for a Nonprofit ECR parcel (58.60 cents) is approximately 8 times greater than the elemental load (7.35 cents) cost for a Regular Rate ECR parcel. Please explain the source of this 51.25 cents difference in elemental load cost.

RESPONSE

b. I do not know. I am not an expert in the development of the Elemental Load cost calculation which is a common part of a standard Postal data system. I use the available data presented in witness Alexandrovich's Base Year testimony.

c.-d. Please refer to my response to (b) above and NDMS/USPS-31(c).

NDMS/USPS-T28-39.

a. Would you agree that if Standard A Mail has an average density of 20.4 pounds per cubic foot (Exhibit K, Table 3) then dropship avoidance of transportation costs of $0.0769, $0.0906 and $0.1108 per pound (for BMC, SCF and DDU respectively, and which you use in Exhibit K, Table 7) are equivalent to a cost avoidance of $1.56876, $1.84824 and $2.26032 per cubic foot? Please explain any disagreement, and supply the correct amounts for costs avoided per cubic foot if you disagree.

b. If Standard A letters, flats and parcels have an average density of 28.4, 20.7 and 8.1 pounds per cubic foot (Exhibit K, Table 3), would you agree that "unbundled" transportation per pound cost avoidances for drop shipment would be as follows ($/lb):

	BMC	SCF	DDU
Letters	0.05524	0.06501	0.0795
Flats	0.07579	0.08929	0.1091
Parcels	0.19367	0.22812	0.2790

If you do not agree, please provide what you believe to be correct unbundled transportation cost avoidances for letters, flats and parcels.

RESPONSE

a. I agree that you have correctly made those calculations.

b. Other than that I got 0.06508 for SCF Letters and 0.22818 for SCF Parcels, I agree that you have correctly made those calculations. Implicit in your statement that these would be the "unbundled" transportation cost avoidances is an assumption that weight/density are the only factors impacting these costs by shape and I can not definitively agree to that.

NDMS/USPS-T28-40

Please refer to (i) the tabulation in interrogatory NDMS/USPS-T28-38(c), "Cost Avoidance From Dropshipment, $/lb," and (ii) to the tabulation in interrogatory NDMS/USPS-T28-39(b), referred to as 'unbundled' transportation per pound cost avoidances. If the bundled 'Transportation Costs' in line 1 of tabulation (i) above are replaced with the unbundled transportation costs of tabulation (ii) above, would you agree that the following tabulation of "unbundled" Cost Avoidance from Dropshipment, $/lb, will result. If you disagree, please provide what you believe to be the correct unbundled cost avoidance from drop shipment of Standard A mail, assuming that weight is the cost driver for nontransportation costs avoided.

Unbundled Cost Avoidance From Drop Shipment $/lb.

	BMC	SCF	DDU
Letters			
1. Trans Costs	0.05524	0.06501	0.07959
2. Nontrans. Costs	0.01350	0.01990	0.02710
3. Total	0.06874	0.08491	0.10669
Flats			
1. Trans. Costs	0.07579	0.08929	0.10919
2. Nontrans Costs	0.01350	0.01990	0.02710
3. Total	0.08929	0.10919	0.13629
Parcels			
1. Trans. Costs	0.19367	0.22812	0.27905
2. Nontrans. Costs	0.01350	0.01990	0.02710
3. Total	0.20717	0.24802	0.30615

RESPONSE

I agree that you have accurately completed the calculations that you describe other than for the items referred to in my response to NDMS/USPS-T28-39(b). I am unable to state that these would be the "unbundled" transportation costs by shape and am not aware of additional data that I could use to make such a definitive calculation for you.

CHAIRMAN GLEIMAN: Anyone else?

[No response.]

CHAIRMAN GLEIMAN: If there is no one else, then we will move on to oral cross. Three parties have requested oral cross-examination of Witness Crum, the Advertising Mail Marketing Association, the Alliance of Non-Profit Mailers and Nashua District, Mystic-Seattle.

Does any other party wish to cross-examine?

[No response.]

CHAIRMAN GLEIMAN: If not, then we will begin with AMMA. Mr. Wiggins.

MR. WIGGINS: Thank you, Mr. Chairman.

Whereupon,

CHARLES L. CRUM

a witness, was called for examination and, having been first duly sworn, was examined and testified as follows:

FURTHER CROSS-EXAMINATION

BY MR. WIGGINS:

Q Mr. Crum, in your response to our Interrogatory 12, and particularly subparagraph C, and the portion which has not moved from the highest to the lowest, you describe the methodology employed in measuring the physical dimensions of parcels, which is the first step in computing density, which is a step toward computing cube, which is a device by which you allocate or assign transportation costs,

correct?

A Yes.

Q I would like to just make sure that I understand how that measuring process takes place.

MR. WIGGINS: And to that, Mr. Chairman, if I may approach the witness?

CHAIRMAN GLEIMAN: Certainly.

MR. WIGGINS: Thank you.

BY MR. WIGGINS:

Q I am handing to you -- do you still have --

A Yes.

Q -- the diagrams --

THE REPORTER: Would you use the mike, please?

CHAIRMAN GLEIMAN: Yeah, we are going to have to -- we can either move it or just pull the mike off the top.

THE REPORTER: I think you had better take the mike off the top.

CHAIRMAN GLEIMAN: Well, I think there's more. There's more rope.

BY MR. WIGGINS:

Q I have handed you a document that is marked as AMMA Crum Cross-Examination Exhibit 1, and I am handing you now a physical package, which I will represent to you is the packaging which contains two audio CD's. You told me when last we talked that you had made a collection of these

things.

A Yes.

Q Does this look like something you have seen before?

A The collection in my desk actually has another company's CD's, but I have seen these before a number of times as well.

Q That variety of packaging --

A Yes.

Q -- which is basically trapezoidal in shape?

A Yes.

Q Your testimony tells me that when things are purely rectangular, the sample pieces are purely rectangular, the measurement device was very easy, you simply measured each of the three sides of the rectangle. But when things were not rectangular, a different measurement technique was employed?

A Basically, that is correct, yes.

Q And can you describe in looking at that package, how that would have been measured?

A I can't say for certain how an individual person would have measured it. I can tell you how I would have measured it, and we had a number of these training sessions, how we responded when we were asked questions such as this. But I can't say for certain exactly what every person who was

involved in doing this study would do. But I can tell you how I would do it and how I responded when I was asked how it would be done.

Q Okay.

A I would treat this as a rectangular piece.

Q Okay. And --

A With the -- yes.

Q I have a tape measure here.

A Okay.

Q Maybe you can actually give us the dimension as we go along. You are measuring the piece, the top piece of the package where the mail address appears, is that correct? And you are measuring the length of it?

A Yes.

Q Okay. What number do you get?

A This looks about like 5 and 5/8ths of an inch --

Q I said --

A -- is what I get there.

Q Five and 5/8ths, isn't it 7/8ths?

A Oh, I'm sorry, 7/8ths, yes.

Q Okay. That's what --

A Yes. I'm very sorry. Yes, 5 and 7/8ths, you are correct.

Q That's what I got. And if you measure the width of it?

A It looks like about 5 and 1/8th, I believe.

Q That's what I got.

A I got right -- got that right that time.

Q Okay. And the --

A Thickness of --

Q Thickness.

A That looks like about 1 and a 1/4, more than slightly more than one 1-1/4, but probably that would just be measured as 1-1/4.

Q Okay. That also is what I got.

A Okay.

Q And if you measure the other dimension, the flanged dimension, --

A Right.

Q -- what do you get?

A That looks about like 7 and 3/4 inches, maybe slightly more than that.

Q That's --

A But to our level ~~our~~ of rounding, that would have been 7 and 3/4 inches.

Q And those are -- those are the numbers that are reflected on the diagram that you have there, aren't there?

A Okay. I probably should have looked at those.

Q Okay. Well, now, I wanted -- I wanted your numbers, not mine.

A Okay.

Q And you said that you would have treated that as a rectangular piece rather than a not rectangular piece, is that right?

A That would have been the intention of our study.

Q Okay. And what would the rectangular dimensions have been? Would they have included the flange dimension or no?

A Again, I can not say in every instance how it was done. I can tell you how I would have done it and the intention of the study.

Q Sure, I understand.

A The intention of the study would not have been to include the flanged dimensions.

Q Okay.

A But I can't say for certain that a given individual involved in the study did not measure the length as the flanged dimension. But that was not the intention.

Q And that given individual who did measure the length as the flanged dimension, if treating this as a rectangular piece, it would have been a rectangular piece 7 and 3/4 inches long, on both top and bottom, is that right?

A If they did that differently than we would have liked or expected, yes, that is true.

Q Thank you. May I have my tools back, please?

A Yes.

CHAIRMAN GLEIMAN: Mr. Wiggins, you made mention of a diagram which we all have copies of. Can we mark that, just so we're clear at this point in time, as AMMA-XE-1 for Witness Crum?

MR. WIGGINS: I'm sorry, Mr. Chairman. Did I hand you a copy that's not marked?

CHAIRMAN GLEIMAN: Well, it's got a title on it, but I just wanted --

MR. WIGGINS: Absolutely.

CHAIRMAN GLEIMAN: So, we'll just call it AMMA-XE-1 for Witness Crum?

[Exhibit No. AMMA-XE-1, USPS-T-28, was marked for identification.]

CHAIRMAN GLEIMAN: I apologize for the interruption, but we needed to make sure we knew which diagram you were making a reference to.

MR. WIGGINS: I have marked two copies of it, Mr. Chairman. I'd like to give them to the reporter, and I move that they be entered into evidence in the proceeding.

CHAIRMAN GLEIMAN: Is there any objection?

[No response.]

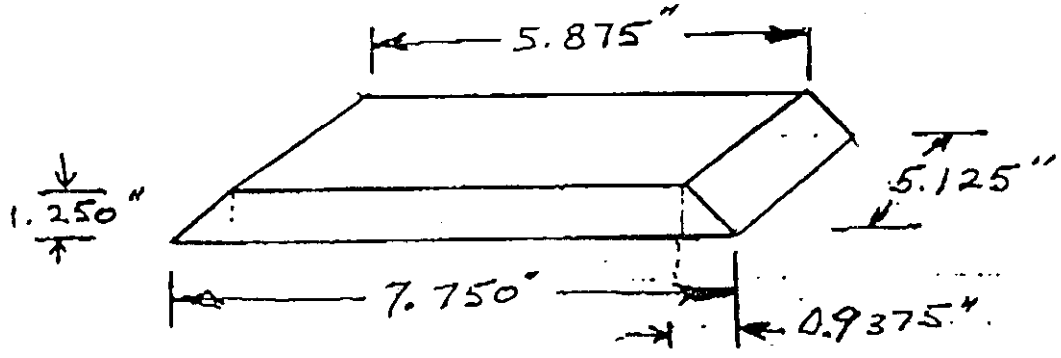
CHAIRMAN GLEIMAN: Hearing none, the cross -- excuse me -- the cross examination exhibit is moved into evidence, and I direct that it be transcribed into the

record at this point.

[Exhibit No. AMMA-XE-1, USPS-T-28, was received into evidence and transcribed into the record.]

AMMA CRUM CROSS-EXAMINATION EXHIBIT 1

Parcel containing 2 CD's



AMMA-X-1 WITNESS CRUM

BY MR. WIGGINS:

Q You go on to say, Mr. Crum, in your answer to 12-C, that the highest possible estimate of cubic volume for the piece that you hypothesize here, one with a length of 10 inches and a girth of 20 inches, is 250 cubic inches, correct?

A Yes.

Q Did you consider pieces that were not rectangular, rectalinear, but also pieces that are round tubes?

A I believe that calculation made -- if you talk about the maximum cubic volume, that would be our understanding of the maximum cubic volume regardless of the geometric shape of that piece.

Q Let me suggest to you that a round piece with a circumference of 20 inches -- which would be the girth, would it not? If you have a round piece, the girth would be the circumference of the round, wouldn't it?

A Yes. Yes.

Q Let me suggest to you -- and perhaps you can accept this subject to your arithmetic check -- that if you had a round piece, 10 inches long, with a girth or circumference of 20 inches, it would have a volume of 318 cubic inches?

A I'd have to check into that.

Q Well, if you divided 20 by pi, you get 6.3662.

You take half that, square it --

A I can accept that subject to check.

Q Okay.

In the last two lines of your answer to C, you make reference to something called the height-width aspect factor. Do you have that?

A Yes.

Q Is that a term that you're defining here, or is that a term that has other existence that I'm just not aware of?

A I'm aware of no existence outside the study for that term. I could be uninformed, but I have no understanding of it outside the study.

Q Well, we're equally uninformed, then, Mr. Crum. I sure couldn't find it anyplace else. And can you give me -- you have an arithmetic definition of it here, 37 divided by 250, correct?

A Yes.

Q That's your definition of the term.

A Yes, 37 divided by 250.

Q Can you give me a more generic definition of the term? What is it really supposed to represent?

A You mean kind of in general language? Is that what you're looking for?

Q As opposed to these two numbers, yes, if you

could.

A I guess it was just meant to be a way to -- again it can be very complicated to get -- you have individuals with again maybe something a little more complicated than a tape measure, but basically a tape measure, and we have -- of the almost a billion pieces in the Third Class parcel mailstream a wide variety of shapes.

One of the purposes of the study is to estimate the cubic volume, the density of those pieces, which can be very complicated.

Again, given that there are a wide variety of shapes, it can be extremely complicated to get the exact density of those pieces through the means that we had and without involving a lot of time for these people collecting the data.

The height-width aspect factor was basically trying to conservatively estimate this density by means of the simplification of reality, basically making the assumption like, well, it could be square or it could be very thin -- let's err very much on the side of it being thin, which would give us a smaller cubic volume and a higher density, so that would be kind of my general explanation of the purpose there.

There is no real clear geometric definition of that. That was just kind of a term that we came up with to

simplify the very complicated reality that exists out there and that we are trying to get at through our study.

Q And it neglected to consider that there might be pieces that are round or have curved portions to them, is that right?

A If you are asking me could the height-width aspect factor ignore that, yes. I don't believe our study in general does, because we took such a conservative approach that we tried to take account of all the unique possibilities that could be out there.

Q Well, if my arithmetic is right, then a round tube 10 inches in length has a cubic capacity of 318 cubic inches.

A Okay.

Q Then the most conservative height-width aspect factor would be 37 divided by 318 rather than 250, correct?

A I believe you have kind of taken that out of context.

If it was indeed a round tube, the numbers that we would get for that, the way we did it, would be much lower, not higher, so this kind of works both ways.

To the extent that there are more of these pieces, then -- if these round pieces -- I am not saying ~~they~~ there are or ~~they~~ there aren't -- these tubular pieces, then we would be under-estimating their cubic volume.

Q You say in the fourth-to-the-last sentence, the one beginning "Alternately" -- do you have that, at the bottom of --

A Yes, I do.

Q That piece could have a height of only .38 inches and a width of 9.62 inches -- to get you the girth of 20?

You add those two numbers together and multiply by 2, correct?

A Yes.

Q Okay. Why .38 and 9.62? Are those measured numbers or are those just hypothesized numbers?

A Those would be hypothesized numbers.

Q Why did you choose those?

A I did not choose both of those two.

When the results of the study were being tabulated, those two numbers were chosen.

Q Not by you?

A Those two numbers right there were not chosen by me. That's true.

Q Do you know why those numbers were selected, or were they just presented to you and you said okay?

A We had a very lengthy discussion I would guess in May of 1996 about that.

I do not recall the exact reason why those two numbers were chosen.

Q Those two numbers are what drive the .148 number, are they not?

A Yes.

Q So if those numbers were different, the .148 number would be different as well?

If you change those numbers, you are going to get a different cubic capacity.

A Well, yes.

Q You are going to be dividing a different number by 250 and therefore the .148 number is going to change --

A Yes, that's true. That's true.

Q That's just arithmetically inevitable, correct?

You talk in your answer to our Interrogatory Number 9 about the density results that were accomplished in a previous study of these issues. That was a library reference in MC95-1, Library Reference 13, is that right?

A Yes.

Q And there you measured or approximated an average density for parcels of 14.9254 pounds per cubic foot, correct?

A Those were the results of that particular study, yes.

Q Were the parcels included in making that estimation both commercial and nonprofit, do you know?

A I do not know -- no, I do not know.

Q Let me represent to you, subject obviously to your check, that if one takes a weighted average of the densities that are recited and that you confirm in your answers to our Interrogatory Number 8, subparts (c) through (f), if you take a weighted average of those numbers, for the commercial mail only the weighted average is 8.01 pounds per cubic foot, and for commercial and noncommercial combined it is 8.12 -- will you accept that --

A I can accept that subject to check for purposes of discussion.

Q Exactly, so that you are right in the range of 8 pounds per cubic foot in the measurement on which you are relying and the measurement in MC95-1 is almost 15 or getting close to double what your measurement is.

Do you have any explanation for that?

A I guess my explanation would be, as I talked in response to your Question 11, the frequency of the samples there was only 42, that this was not the purpose of that study, that parcel data was only provided there as a specific response to a request from the OCA, that that was not the intention and that this was just kind of something they did to estimate density, and they did not specifically try to look at parcels or look at parcels from the national perspective.

Q You think they just got it wrong?

A My belief is that the numbers presented as a result of our parcel characteristic studies are a better estimate than the previous study came up with.

Q You mentioned the frequency of samples in the two studies and remarked that the frequency of samples in the MC95-1 study was only 42, right -- and you say that in your interrogatory answer?

A Yes.

Q When you say frequency of sample in the current study, the one that we -- in this case -- the frequency of sample is each piece, is that correct?

A Yes, that's correct.

Q And in MC95-1, what was the frequency of sample? Was it each piece?

A No. It was the small container of known size that the pieces were put in and weighed.

Q There wasn't a single container size, was there?

A I don't recall exactly how that worked in the MC95 study.

Q Part of the questionnaire requires the sampler to describe the container. You can't tell from the results, because they're alpha-numerically coded, but it looked a lot to me as though there were multiply-sized containers.

A That's certainly possible.

Q Which means that there are multiple pieces in each

of those containers.

A Yes, it would certainly be more than one piece.

Q So, when we talk about a sample frequency of 42, it's not 42 pieces but 42 lots of pieces.

A Yes, that's true.

Q And we don't know how many pieces that might be.

A That's correct.

Q In methodological terms, judging as between measuring the individual piece, which, when you and I talked, you conceded that there was some possibility that different people might do it in different ways.

A That's a possibility.

Q Sure. And alternatively, the measurement device that was employed in the MC95-1 study -- which is fill a container, weigh the container, count the pieces, divided, correct? Isn't that essentially the methodology?

A That's essentially the methodology.

Q And is there more or less room for human fallibility, if you would, differences in the way you read the instructions in your study or the MC95-1 study?

A I would guess, as far as human fallibility, which is only one of the many factors that we would assess in trying to see which is coming up with the best estimate -- and I can't say this for certain, but my personal intuition might be that the human fallibility factor might be higher

for the study that we did, but again, there are many factors other than human fallibility, and I'd also like to point out regarding the height-width aspect fact that I think it was between 80 and 85 percent of the pieces did not involve the height-width aspect factor but involved direct measurement of the piece.

Q Eighty-two percent. Isn't that the number?

A Yes, I think that's right.

Q Was there a reason -- you obviously were familiar with the MC95-1 study when you conducted your study, weren't you?

A Yes.

Q And there must have been some reason that you opted against the fill-the-container methodology which limited human -- which minimized, at least somewhat, the error introduced by human fallibility in measurement? There's a reason you chose to measure pieces rather than filled containers.

A Yes.

Q What was that reason?

A Well, the intention -- we were trying to -- if all you're trying to do is measure density, it would take less time to dump a number of pieces in a container, measure that container beforehand and weigh it.

Q Right.

A Our intention was not only just to do that but to get other characteristics of the piece. Therefore, we measured them directly.

Q Other characteristics such as the content of the piece, correct? That's one of the things that the study measured.

A That's one of the things, yes.

Q You and I talked about that the last time we spoke --

A Yes.

Q -- and remarked on the fact that there seemed to be an inordinately large number of -- CD disks is one of the categories, correct?

A Yes.

Q And that is, other than other, that is the single largest category of sampled parcels?

A I don't remember, but subject to check, hypothetically, that's possible.

Q And when last you and I talked, we talked about the fact that there was -- there were measured CD parcels in each of the ounce increments save one, as I recall, and I said to you, gee, doesn't that seem strange, Mr. Crum, you know, this is a two-CD packet, it weighs something, one-CD packet weighs something, a four-CD packet weighs something else, it ought to be bumpier, and if I remember your

testimony correctly, you said that you, too, had been puzzled by that, looked into it, is why you have this collection back in your office, and determined that there were bunches of America On Line disks that were mailed out at about that time. Do I remember that correctly?

A Yes.

Q Do you know what the physical characteristics of those AOL disks are or were? Are they -- do they look like this?

MR. WIGGINS: And I'm holding up, Mr. Chairman, the package that is described in the cross examination Exhibit 1.

THE WITNESS: Again, I'm only speaking for the ones that -- for the one that I received in the mail at my house. I can't speak for the national distribution that America On Line would have sent out across the country. Since where I live was not sampled, I have no idea whether what I got was unique or whether the national mailings were similar or how that varied.

BY MR. WIGGINS:

Q What did the one that you got look like?

A If I remember correctly, there was a little CD and also a floppy disk in a plastic or cardboardish small -- maybe there was like some kind of sub-cardboard packaging and the larger piece was in plastic, something like that. I

don't remember exactly.

Q Would you say --

A It did not look similar to the box that you're holding in front of you.

Q Right. Would your impression be that it was as dense as the material that was measured in MC95-1, the 14, almost 15 ounces per cubic inch?

A I'm not going to be able to estimate the density, I'm sorry --

Q Okay.

A -- without measuring that.

Q When, if you can do this for me just arithmetically to make sure that I understand how this is done, when you have length and girth and you are seeking to measure cube, is there an arithmetic formula by which you do that? How do you combine those numbers and come out with -- girth equals -- I mean, cube equals?

A There is no mathematic relationship. There is a wide variety of possible relationships between girth and cube. There is no direct mathematical relationship.

Q But in doing this study, you have pieces that were non-rectangular, correct?

A And we had to make certain assumptions, yes.

Q And you had to turn length and girth, which were the only two measures you had for those pieces, correct?

A Yes, exactly.

Q And you had to turn that into cube, correct?

A Yes.

Q You had to perform some arithmetic manipulation to do that.

A Yes, we had to estimate that and we used the, for want of a better term, what we called the height/width aspect factor.

Q And -- okay, let's suppose what you supposed in your answer to 12-C, a length of 10, a girth of 20. And you've illustrated there that you could come to two different cube numbers. I mean you could come to any number of different cube numbers, but you could come to 250 -- I say 318, if it's round, or you could come to 37 or a number even smaller than that, correct?

A I would have to think about theoretically what the smallest and largest might be, yes.

Q Although the smallest number is going asymptotically to approach zero, isn't it?

A No, parcels I don't believe can be thinner than -- I believe you would get into some dimensional things and again I would have to think about that more carefully but I believe there are some dimensional constraints such that it would not asymptotically go down to zero.

Q Well, you and I talked one time previously about

the DMM definition of what a parcel is and I'm still confused. I got lectured by some of your colleagues about it as well. But at least we have the range between 37 and 250 or 318, correct?

A Yes, there is a range.

Q We agree on that?

A Yes.

Q So now I present you with these two numbers, length of 10, girth of 20 and you are going to tell me cube. Tell me how you get there. Just arithmetically, length of 10, girth of 20. Tell me the cube.

For a piece that came up in the study, I'm just trying to figure out how that was calculated.

A I'm not prepared to go through all these calculations here on the stand. I mean, I --

Q Can you tell me the formula? I'm not asking you to do arithmetic on the stand, just give me the formula?

MR. WIGGINS: Mr. Chairman, I am not trying to torture the witness here or any of you or me. Could I request, Mr. Chairman, that if there is a formula for the calculation of this, and I believe there is and it's fairly simple, that it be supplied for the record?

CHAIRMAN GLEIMAN: Certainly, you can request it and if it exists, Mr. Reiter, will you supply it for the record?

MR. REITER: Yes, we will.

MR. WIGGINS: Mr. Chairman, I have no further questions. I have a matter that probably is a procedural matter that I should have raised at the onset. The last time Mr. Crum was on the stand, there were some interrogatories put into the record by the Recording Industry Association of America, the last of which asked the witness to confirm the questions put to him in MC-97-2 and his answers to them were the same as his answers would be today if put to him.

I had reached an understanding with Mr. Reiter that the Postal Service was not obliged, in order to save a little bit of paper, not obliged to include in its answer to that question copies of those previous interrogatories but that when I designated them for the record, I could put them on and they would get into the record that way.

I did that and I think perhaps what happened is that the OCA also designated that interrogatory answer but did not include the prior interrogatories in their answers so that they weren't transcribed into the record.

I would ask permission and I talked with Mr. Reiter about it this morning, the Postal Service has no objection, that I would be able to provide two copies of that RIAA/USPS-T-28-5 interrogatory, the Postal Service's answer and append to it as properly should have been before

the prior interrogatory questions and answers?

CHAIRMAN GLEIMAN: If Mr. Reiter is in agreement, and you have two copies, we will provide them to the reporter.

MR. WIGGINS: I don't right now have two copies but I'll be right back with two copies, if you could indulge me, Mr. Chairman?

CHAIRMAN GLEIMAN: How about, rather than having you run around trying to get copies that we take care of this situation when we do the institutional responses on the 10th?

MR. WIGGINS: That is absolutely acceptable. Certainly.

CHAIRMAN GLEIMAN: Is that agreeable, Mr. Reiter?

MR. REITER: That's fine, Mr. Chairman.

CHAIRMAN GLEIMAN: And let me just ask one other question. Since this is really not an institutional response that we are dealing with, I can assume, since this is in effect additional designated written cross-examination, that your answers would be the same today, tomorrow and next week on the 10th, right?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: Thank you, Mr. Crum.

MR. WIGGINS: Thank you, Mr. Chairman.

CHAIRMAN GLEIMAN: Thank you, Mr. Wiggins.

That brings us to the Alliance of Nonprofit Mailers. Mr. Thomas indicates he has no cross-examination.

Mr. Olson, Nashua District, et al.

FURTHER CROSS-EXAMINATION

BY MR. OLSON:

Q Good morning, Mr. Crum. Bill Olson from Nashua, District, Mystic, and Seattle again. And I want to begin by asking you to turn to the revisions to USPS-TS -- excuse me, USPS-T-28, which you made at the time you appended Library Reference K, and specifically page 10, if you have that.

A Okay.

Q In the first paragraph, you say, "In 1990 the Postal Service took the first step toward recognizing the effects of shape in Standard A, then third class, when Witness Moeller and Shipe produced studies showing shape-based cost differentials between letters and non-letters." Then you give a reference.

"This cost difference was supported by the models presented in Docket No. MC95-1. Though the rate distinction has always been limited low pass-throughs, this concept is still integral to current Standard Mail A rates." Correct?

A Yes.

Q What do you mean integral?

MR. REITER: Mr. Chairman, I am going to object to that question. As I think we pointed out in one of our

motions, this page, although it was revised when the material was incorporated into the witness' testimony, the only change was to change the reference from Library Reference H108 to Exhibit K. None of the other material on the page was changed. This page, and this paragraph, has been exactly the same, has -- no direct change was made as a result of that incorporation. But this --

CHAIRMAN GLEIMAN: It is part -- excuse me, sir. It is part of T-28.

MR. REITER: Yes, my understanding is that today's cross-examination concerns the material that was originally filed as the Library Reference. And unless there is some direct connection, --

CHAIRMAN GLEIMAN: Well, we --

MR. REITER: -- such as a number from that Library Reference.

CHAIRMAN GLEIMAN: Well, the first thing is we don't know whether there is a direct connection or not. I have learned never to anticipate where the counsel who practice before the Commission are heading. They surprise me with great frequency.

And the other thing is that I think, in the interest of moving along with these proceedings, given all that has transpired, it is -- we are probably all best served by letting the witness answer the question, if the

witness can answer the question.

So I would like to allow the question and see if, indeed, the witness can answer it. And if the witness can't answer, then we will move on to the next. So.

BY MR. OLSON:

Q Do you recall the question?

A Yes. I believe you asked me what I meant by integral.

Q Yes.

A Basically, I think what I meant there is that there are shape-based rates based on letters or non-letters in the current rates.

Q Do you believe -- are you -- let me ask you this. Are you aware of the fact that in Docket No. MC95-1, the Postal Service proposed the abolition of the letter flat cost differential for ECR?

A I guess I am familiar with that to some extent, although not probably to any level of detail more than you have just said.

Q Are you aware of the fact that the Postal Service is proposing in this docket that for ECR basic, that the letter flat differential be set at a zero pass-through, in other words, obliterating the letter flat differential for ECR basic mail?

A I guess that sounds along the lines of what I

understand.

Q Does that alter your conclusion that the letter flat differential is integral, at least to the Postal Service, for Standard A mail rates?

A I guess that would not necessarily have me change that, ECR is kind of a different thing than non-ECR.

Q So, in other words, it might be integral for non-ECR but not integral for ECR.

A That might be a fair thing to say.

Q Okay. Let me ask you to turn to Table 7, which is the table that Mr. Reiter just described that has been replaced with a non-truncated table.

A Okay.

Q And first of all, in response to one of our interrogatories, I believe you said that the reference in the first line to Appendix A is to Library Reference 108, correct?

A Yes.

Q Which does not appear in this table even as revised. Is that correct?

A Yes.

Q Are the numbers in section one of that table in thousands, and if so, where is that indicated?

A I believe, yes, they are in thousands.

Q Is that indicated in the table?

A I think that would be back in -- no, it's not.

Q Would you take a look at the third section of the table and tell me if those --

A Actually, I don't believe that is in thousands. I'd need to check that. I'm sorry. I'm sorry. I don't believe they are in thousands.

Q They're not in thousands. Are they in pounds?

A Yes.

Q In section three of that table, are those in thousands of dollars, the avoided costs?

A Yes, they're in thousands of dollars.

Q Except, of course, the column that refers to cents per piece, correct?

A Except for the average -- yes.

THE REPORTER: Except for the average what?

THE WITNESS: Average avoided cost per piece.

BY MR. OLSON:

Q That's not indicated in the table at the moment, correct, the fact that it's in thousands of dollars?

A No, it's not.

Q Could you take a look at your response to NDMS-USPS-T-28-27? And there you append -- there you append Appendix A from Library Reference H-108. Is that correct?

A Yes, I include that in my response to A. Is that the sheet you're talking about?

Q I'm sorry. I didn't catch that.

A I was including that in my response to part A. Is that the sheet you're --

Q Yes.

A -- referring to?

Q Well, I'm not sure. There's one two-page attachment to your response to interrogatory 27. It's labeled Table A-1, and the next page is labeled fiscal '96 Standard A mail, pieces by entry discount, and perhaps I don't -- does one refer to A and one refer to B?

A Yes. The first one refers to question A, and the second one refers to question B.

Q Okay. So, with respect to the first page, which is labeled Table A-1, that comes from Library Reference H-108, Appendix A?

A Yes, it does.

Q Okay. There's a column called "uncontrolled" and a column called "controlled." Could you help me understand the difference between those two?

A Yes. Basically, what's going on here is we get volumes by the RPW system, which is the official volume system of the Postal Service, that does not break out volumes by shape, so we use the PERMIT/BRAVIS system as a distribution key to get those volumes ~~to~~ by shape.

The uncontrolled numbers are the PERMIT/BRAVIS

numbers as they came out. The controlled numbers are taking the PERMIT/BRAVIS numbers and controlling them to the RPW totals.

Q And why do you do that?

A The way we calculated volumes was to use the RPW system as a base. Those are the official Postal Service volume estimates. Therefore that's -- those are the final numbers. So if you would take the uncontrolled numbers and add all the uncontrolled numbers up, you would not get the -- you would not exactly get the official RPW volumes of the Postal Service. So that's why we have to control them to the total, so that that total's consistent with the official Postal Service volume estimates.

Q Okay. So you're grossing it up to conform to RPW?

A I believe that's a fair -- basically a fair statement.

Q Okay.

A It's not always grossing up. In some senses it might be grossing down, depending on where the estimate goes.

Q Okay. I understand. Thank you.

Let me ask you to turn to your response to NDMS T-28-29. And we -- and the question asked you to consider the cost estimates in your testimony for ECR and regular flats and parcels, and asked you to make some observations

as to why the ECR flat costs are less than the regular flat costs and why the ECR parcel costs are less than the regular parcel costs. Correct?

A Yes.

Q And we hypothesized that it could be caused by greater presortation and drop ship entry, and you say that it could be caused by many things, two of which are those factors. Do you have some other matters -- some other factors in mind when you say it could be caused by many things?

A I don't -- it's not -- I'm -- there could be many other things. I'm not -- not telling you some important factor that I'm not thinking of -- that I'm just not writing down here, but there could be a variety of things that could cause that, and I don't know to what extent exactly the drop ship and presort, for example, if -- what percentage of that difference might be caused by drop ship and presort.

Q Do you believe it's the bulk of the difference between regular and ECR that is caused by presort and drop ship?

A For flats I guess I could be fairly confident that they're the bulk. For parcels I can't say for certain. If what you mean -- again I can't be certain.

Q Okay. But you -- in other words, if I were to ask you to identify --

A Those are two -- certainly those are two very important factors.

Q So if I were to ask you to identify those many things that you reference, you're saying I take it that like you say you're not withholding something, that just nothing else particularly comes to mind, but you suspect there might be some other factors.

A If I sat down and thought about it, I could probably pull them together. For example, there could just be a different mix of pieces in regular versus ECR. Again I believe I refer to that in another interrogatory response that there's -- we're not talking about this piece versus this piece, we're talking about the mix of pieces that make up ECR versus the mix of pieces that make up regular, and there could be a variety of characteristics such as geographic characteristics or physical characteristics of the piece unrelated to the shape that might theoretically have some unknown impact.

Q What's a geographic characteristic of a piece?

A For example, if there are certain facilities in the country might sort mail more efficiently than other facilities. If for some reason there was a difference in that mix nationwide -- and again this is very complicated, the hundreds of processing facilities. Obviously if you have an average efficiency there's going to be different

levels, and if there would be an uneven mix above that 50 percent, whether it be kind of 49 to 51, that could certainly have some impact.

Q So, if the pieces --

A In talking transportation, geographic might mean the actual distance traveled.

Q So, if the pieces that were in the mix happened to be in facilities that had higher-than-average unit costs or lower-than-average productivity, then they'd be adversely affected in the study.

A That would have some unknown impact, but yes, that could impact results.

Q Okay.

Let me ask you to turn to your responses to the interrogatories we received yesterday, and I believe there were just a couple that did not appear to receive a response, and I wonder if I can focus you on your response to NDMS-USPS-T-28-31(d)(3), and there we talk about certain comparisons of mail processing costs and the unit costs that are developed from your testimony, and our question says within non-profit in section (c) -- I guess we have to look at that to understand the question (d) -- within non-profit, the unit mail processing costs for ECR parcels of 36.72 cents is almost the same as the unit cost for regular parcels, 37.05 cents, please explain, and then, in (d)(3),

we say what's the confidence interval for the two unit cost estimates. I don't believe there was a response to that question. Do you have -- can you respond to that question?

A I don't have confidence intervals for those two estimates.

Q Could they be developed?

A I'm not certain if they could be developed or not. I'd have to think about that more deeply.

Q Can you tell me how you would go about developing it if there was a formula to develop that or information that would be used to develop that confidence interval?

A Since this is mail processing, we'd have to trace through the results of the numbers that I use and how they are developed up from 146 through 106, and since you're talking unit cost estimates, we'd also have to do the same thing for the volumes.

I can't think of how that would be done, but I don't want to say that that's not -- I can't say that that's not possible.

Q But you haven't done that on your own for any of the unit costs that emanate out of your study?

A Basically, because there are -- the unit costs that I use are the total costs over total volumes. There are pieces that make up that where it would not be possible to do confidence intervals. That's why we have not done

that for the total.

For an individual unit cost such as mail processing -- and again, I don't know for sure if that's possible or not, but the reason -- I didn't do it because there were pieces of that total unit cost where you couldn't do it. Therefore, for the numbers I use, it's not possible.

For an individual item like mail processing, it may be possible, but I have not looked into that, and I didn't consider that, because there were pieces for the total, which is the one I used, where you couldn't.

Q So, you're saying you cannot develop confidence intervals for the totals that appear in your -- the total costs and total volumes that appear in your --

A Yes, that's my understanding.

Q And could you state again the reason as to why that's not possible to develop?

A Again, this is probably over a year ago where I looked into this, but if I remember correctly -- and this -- I believe that the -- one of the items particularly was a transportation that we had no way of taking our transportation cost elements by shape and getting -- feeding them up into confidence intervals.

I believe there was also an issue with the volumes and a number of the other segments where there were problems, and the conclusion was that it was not possible to

do it for the total unit cost.

I don't remember all the exact reasons, but I believe that that kind of pieces it together.

Q Could I ask you to turn to your responses to NDMS/USPS-T-28-32, where we develop unit costs based on city delivery -- city delivery carrier costs. Do you have that?

A Yes.

Q Okay.

And there we, in Section B, point out that the unit delivery cost for a regular parcel is 9.72 cents and for an ECR parcel 27.63 cents. Despite the fact that ECR parcels weigh a third of what regular parcels weigh. Do you recall that question?

A Yes, I do.

Q In other words, the unit costs of ECR are three times those of regular and yet only one-third the average weight. Correct?

A Yes.

Q Does that strike you as anomalous?

A No, it doesn't.

Q Can you explain why not?

A I think I fully responded that in my answer to B. There are many possible explanations about why that would be. Some of these discussions talk about operational reasons, other reasons just talk about simple mathematical

reasons related to how you calculate unit cost.

Q Okay, we will save the last paragraph of your response having to do with the mathematical approach to calculating unit costs for a second and deal with the operational reasons if we could. First of all, when we asked you if you could account for the factors that cause the difference of 17.91 cents, you said, I don't know, I didn't conduct a study, however based on your experience and such, the following might possibly account for the difference.

A In part.

Q I'm sorry, yes. It does say, in part.

And then you have a number of factors. The first one is, you say, regular parcels usually come in as one at a time and are processed as part of the carrier's normal daily activities. ECR parcels can come in larger groups and thus can cause the carrier to deviate slightly from his or her normal routine adding slightly to the resulting costs. Can you explain that to me?

A I guess basically what I was trying to get across there was a discussion I had with a carrier where I kind of asked him a number of questions like this and he responded that the -- I don't know, for example, maybe like a CD just kind of comes in through the mail stream and this particular carrier cased single CDs and did other things. Again, it's

very complicated.

But ECR parcels can come in in a bag and, depending on what they are, sometimes he kind of has problems dealing with that mass and it kind of causes him to go out of his normal -- you know, his normal day, for example. This is, again, one carrier and it is one possible explanation.

I don't know to the extent that this particular carrier's experience is representative of the hundreds of thousands of carriers that we ~~had~~ have, but that was one possible way, one possible explanation.

Q The reason I was asking is it appeared to me possibly counterintuitive. Sometimes when you have lots of the same thing to do, you wind up doing them more efficiently, isn't that true?

A Yes, but I don't really believe that is counter-intuitive because, again, a given carrier, if there is a vast -- the volume of Third Class parcels is heavily weighted towards regular so maybe every day they are getting regular parcels but -- and, again, they kind of come in one at a time. But the ECR parcels come in in batches and that total volume is relatively low so they might get that ~~back~~ batch of ECR parcels once every three weeks whereas he would get the regular parcels kind of coming in in the ones and twos or more every day.

Q We are still dealing with unit costs, though, right?

A Right.

Q Let me ask you about your next reason there. You say, also samples which are generally associated with carrier route mailings can require a detached label card and the card must be cased with letters and flats while the parcel must be prepared for delivery.

First of all, do you know the cost of casing a card?

A No, I don't.

Q Do you think it could be anywhere near 16 cents?

A That sounds -- I don't know. I don't know.

Q When you say the parcel must be prepared for delivery, do they actually prepare individual parcels for delivery?

A Carriers do this in a number of different ways and I have actually seen individual carriers deal with the exact same pieces in different ways. Some of them line it up around the back of their truck in order of delivery. Others do a variety of different things. So preparing for delivery was meant to be a wide range of things, most of which I know nothing about.

Q Okay. Of course, if it has a detached card, you don't actually line them up in order because they are all

identical, correct?

A Exactly, yes.

But, again, depending on the size and the particular carrier, they might actually -- again, they wouldn't have to line them up in order of delivery, but they would have to know that these parcels are going to these houses --

Q That's the function of the detached card, correct, to deliver it?

A Yes.

Q Now, you criticized in the rest of your response there the approach of taking city carrier costs and dividing them by total volume as opposed to the volume carried by city carriers.

Let me first ask you, is the volume carried by city carriers a number that is available anywhere?

A I don't have it. I would think it might be available. I'm not sure if it is available by subclass. I'm not sure how that data would be broken out but I don't have it.

Q And in response to the next interrogatory number, -- excuse me, in response to Interrogatory 34, you make a similar criticism there where we take rural delivery carrier costs and divide by total volume, correct?

A Yes.

Q For the same reasons?

A Yes.

Q You think we -- it would have been better to use the volumes being delivered by rural carriers, correct?

A Yes. Sorry.

Q And do you know if that is a number that is available?

A That would be the same as city carriers. I don't have that number. I don't know for certain if it would be available or in which ways that would be broken out.

Q Well, let me ask you, if you were to take the city delivery carrier costs and add them to the rural delivery carrier costs, and divide by your total volumes to get unit delivery costs, would that be a more valid approach to examining unit costs?

A That would be a more valid approach than breaking it out. I can't say -- I haven't fully thought that through whether I might, what specific criticisms I might have of that. But, yes, combining those would be more logical than taking them separately and dividing them by total volume.

Q It still might misstate something slightly in that there are certain pieces that are delivered, boxes?

A Yeah, that is one example.

Q But if we were to take a look at that and examine that, I can -- last night I wish I had -- had had time to

type this up and to make it an exhibit, but what I did was go back to your Appendix K, Table 3-A-1. If you can walk through one or two of these numbers with me very quickly. In Table 3-A-1, I took the cost segments 6 and 7, city delivery carrier total of 19,192,000. Do you see that number?

A Yes, I do.

Q And I added the 559,000 from rural delivery carriers, cost segment 10, the total, and I got 19,751,000 for total delivery cost. Is that the total delivery cost based on this exhibit?

A 19,751,000, yes, that's what I got.

Q Okay. And then what I did was divide by the volume that appears in the distribution key, line 1, 69,464,000.

A Okay.

Q And I got a unit delivery cost for this Table 3-A-1, which is commercial ECR, of .2843.

A That's what I just calculated, yes.

Q Okay. And let's just take the next one, 3-B-1, and there I added together 84,470,000 with 25,173,000, and I got 109,643,000. Divided that by your total volume of 869,434,000, and I don't know if -- it went awfully fast --I don't know if you actually were able to replicate that, but what I got was a unit cost of .1261.

A That's what I just calculated, yes.

Q Okay. So there we have, for commercial ECR, a unit delivery cost of 28 and 1/2 cents and a commercial regular unit delivery cost of 12 and 1/2 cents approximately. Now, that you -- first of all, have you ever developed numbers like that before in analyzing the results of your study?

A I had looked at the comparison between ECR and regular, yes. And that resulted in me asking questions of carriers that gave you the simple operational potential explanation that you see on the response that we just talked about.

Q Okay. But here we are talking about a difference between 12 and 1/2 cents and 28 and 1/2 cents, both for Standard A regular mail, where the lower cost by, you know, whatever, certainly less than half of ECR. We are dealing with -- the difference is 16 cents, if I am not mistaken. Correct?

A A little under 16, yes.

Q Okay. Now, that you realize how large the difference is, does that cause you think of any other factors that might account for it besides the ones we just discussed?

A I don't know of any other factors. I don't know for certain, no.

Q Does that -- does the size of the difference in unit delivery cost estimate give you pause about the validity of your study?

A No.

Q Do you think these are accurate numbers?

A I'm sorry. Which numbers?

Q The .2843 as the unit delivery cost for commercial ECR and .1261 as the unit delivery cost for commercial regular.

A I would not be comfortable characterizing those numbers as the unit delivery cost, no, I would not.

Q And tell me why.

A Again, because I would have to look in, for example, box holder. ~~Who~~ How much -- how many of the pieces were delivered to box holders? Perhaps that is very different for regular than for ECR. There could be a lot of complications that could substantially impact those numbers, and I would have to look into that and probably a number of other things that I would have to think about.

Q That was the only one I could think of, the issue of box holders. Do you have any reason to believe that box holders receive more or less commercial ECR parcels than commercial regular parcels?

A I don't know the difference that might be.

Another one for an example is rural -- again, if

you are breaking out things, particularly in the delivery costs, the way rural parcels are counted in the rural carrier cost system there is a different dimensional criteria such that there would be fewer costs allocated to parcels in rural delivery and that could have impacts also based on the volume delivered by rural carriers in regular versus ECR, so that is at least another added complication that could have a substantial impact.

I don't know what that impact is, but it could certainly be quite substantial.

Q You are saying that for rural carriers that there is a different definition of parcels than for city carriers?

A Yes, and city carriers also -- rural is the only definition that is different.

City carrier is also aligned with volumes and all the other things that we are looking at.

Rural carriers is unique in that they define parcels by different dimensional criteria than any of the other categories that we looked at.

Q Okay, and do they define it more broadly or more narrowly? In other words, do they show an artificially high number of parcels or an artificially low number of parcels? What are you saying?

A Again, I don't look at it for volumes. I look at it for costs.

The way the rural carrier system does this, more pieces are defined as flat, so for example as related to our volumes if you take a given piece for volume purposes it would be counted as a parcel but for cost purposes it would be allocated to flat, so that would understate the true rural carrier costs for parcels by some unknown amount.

Q Okay. In other words, if what is a parcel under the DMM and to a city delivery carrier is miscategorized as a flat, that would result in increased cost being thought to be incurred by flats handled by rural carriers, is that what you are saying?

A Again, it wouldn't be miscategorized for purposes of the rural carrier cost system. They have their own way of categorizing letters, flats, and parcels for the purposes of that system, which I believe involves compensating the carriers, but for my purposes and my use of those numbers it would result in costs for parcels, as we call them, being allocated to flats and thereby raising the cost of flats and lowering the cost of parcels and shrinking the cost difference between flats and parcels.

Q Okay, but just to put a point on this, if an item that is considered a parcel across the board in the Postal Service is for whatever reasons in the rural system considered a flat, that would result in extra cost being thought to be incurred by flats rather than parcels. That

is what you are saying, isn't it?

A I think I followed your logic there. Maybe you could repeat that again? If we are on an important point here, I want to make sure I exactly understand what you are saying.

Q Sure. I think what you are saying is that since the definition of parcels to a rural carrier is broader -- I'm sorry, is more -- strike that. Let's go back to flats.

You are saying that more items are considered to be flats which are really parcels --

A Yes.

Q -- they are considered to be flats in the rural system, but they are really parcels to the rest of the Postal Service?

A Yes.

Q Okay, and because of that it results in what should be considered parcel costs being charged to, just to pick a term, flats.

A Yes.

Q And an overstatement of flat costs and an understatement of parcel costs?

A Yes, by some unknown amount.

Q Okay. Where do you get that from?

I can ask you to look at the attachment -- this might be your response to Interrogatory T-28-3.

A Yes.

Q And there you attach two helpful documents.

The first is Handbook F-45, which is instructions for the IOCS system, correct?

A Yes.

Q And that shows that the definition of a flat for the IOCS system is items with a maximum length of 15 inches, height of 12 inches, and thickness of three-quarter inches, correct?

A I'm sorry, did you just read off the maximum size of a flat?

Q Sure.

A Length, 15; height, 12; thickness, three-quarters of an inch.

Q Right, and that appears on page 4 of the attachment?

A Yes.

Q Therefore anything that exceeds those dimensions in any respect is considered a parcel in normal parlance, correct?

A Yes.

Q Now for rural carriers, you then attach a document called Rural Carrier Route Test Instructions. What is that document? What are rural carrier route test instructions, do you know?

A What are the rural route test instructions?

Q Yes. Is it comparable to the ISCS Handbook F-45?

A Yes, it's comparable to that. I would consider it more comparable, for example, to the city carrier instructions. But, yes, it's a kind of tool for the people measuring these types of things, yes.

Q Okay, so these are the definitions that are applied by the people measuring rural costs and determining whether it is incurred by parcels or flats or letters, correct?

A Yes.

Q And where are the maximum flat shape dimensions specified in that handbook F-56?

A Okay. I don't see -- I don't believe they break things out exactly the same way here as they do in handbook F-45.

Q Would you take a look at the top of page 58?

A Okay.

Q And there it defines parcel-shaped mail. And it says, this mail consists of any article that exceeds any one of the following dimensions: five inches high, 18 inches long and 1-9/16 inches wide; is that correct?

A Yes, I see that.

Q Under the standard definition of a flat, a flat may be as high as how many inches?

A The maximum height dimensions for a flat for F-45 for DMM purposes is 12 inches.

Q And for rural delivery purposes, how high?

A It would be five inches.

Q Now, doesn't that indicate to you that more items would be considered parcels under the rural instructions than under the standard instructions, at least for that dimension?

A For that particular dimension of height.

Q Okay, now, for the others, it works the other way, does it not?

A Yes, it does.

Q That under the standard measure, a flat cannot be more than 15 inches long but here it can, under the rural system, it can be up to 18 inches long, correct?

A Yes.

Q And the standard width of a flat cannot exceed three-quarters of an inch but here it can go up to 1-9/16 inches, correct?

A Yes.

Q But let's focus for a moment on the height.

You, as I noticed from your biography, used to work for Westvaco, correct?

A Yes, I did.

Q And you worked regarding -- you worked in the

envelope area for Westvaco?

A For some portion of that time, yes.

Q Certainly they make a lot of envelopes at Westvaco, don't they?

A They certainly do.

Q And, as a matter of fact, I think it said that you worked in their envelope plant in Indianapolis?

A Yes.

Q So you know something about envelopes?

A Probably not as much as I should but I know something about envelopes.

Q Okay. What kinds -- sorry. What kinds of standard size envelopes would be considered parcels for purposes of the rural system that are considered flats for the purposes of the rest of the Postal Service?

A I would guess ones that are more than five inches high.

Q Six-by-nine, is that a standard envelope size?

A I'm not sure what you mean by "standard".

Q Could you buy them at Staples?

A I would imagine you could buy six-by-nine envelopes.

Q 8-1/2 by 11 or thereabouts?

A Yes, that's -- I'm sure you could buy such envelopes?

Q And they would be parcels under the rural system but flats under the other system, correct?

A To my understanding. I might have to -- to my understanding.

Q And 10 by 13, that would be a flat to the world but a parcel to the rural system, correct?

A To my understanding, based on what -- based on what we are reading right here.

Q Well, this is what you cited as authority for your proposition when you respond to the question to begin with, correct?

A Yes, yes.

Q So this is the definition of a parcel in the rural system, is it not?

A It's my understanding.

Q And this is the definition that was used when the tests were done to determine which pieces were parcels and which pieces were flats in the rural system, correct?

A To my understanding, yes.

Q How about 11 by 14 sized envelopes, would they be also flats to the world but parcels to a rural carrier?

A Sounds like they would, based on this, yes.

Q How about 12-by-15-inch envelopes?

A Let's see here. Maximum of 12 inches. So that seems like that fits into that category, also.

Q Based on that, do you want to reconsider your conclusion that more -- that the -- I believe you said in response to Interrogatory T-26-3 in the second paragraph of your response to A, the definition of a flat as opposed to a parcel is generally broader for purposes of the rural carrier cost system. Would you like to modify that?

A No, I would say it's generally broader.

Q Because two of the three dimensions are larger in the rural system; is that why it's generally broader?

A That's one of the reasons.

Q Do you know how many envelopes --

A I believe I also looked at some information from the characteristics study that suggested that thickness was a greater determinant of that shift between flats and parcels than height was.

Q In other words --

A It was not a conclusively analysis, but based on reviewing that, that was my impression.

Q Can you tell me exactly what you're referring to?

A The parcel characteristics study which was produced in conjunction with LR PCR-38 in the parcel case, which is the document which does, among other things -- the only thing that that document does in this case is produce the density estimates for parcels. But that was a study that took place back in 1996.

Q And the conclusion you derive from that is the thickness causes many, many pieces to become parcels which otherwise would be flats. That's what you're saying?

A Yes, that was my conclusion from --

Q That there are many, many flats between three-quarters -- things that would be flat but for the fact that they exceed the dimension of 3/4ths of an inch and yet are less than 1 and 9/16ths inches; that's what you're saying?

A That's -- yes.

Q And so based on what you know about envelopes and examining packaging and such, how many envelopes have you come across -- let's first deal with the length -- that are between 15 and 18 inches long?

A I don't really think I can answer that question.

Q Not too many?

A I don't know.

Q Do you ever recall seeing an envelope that was more than 15 but less than 18 inches long?

A An envelope?

Q Yes. Any kind of packaging, frankly, but I'm mostly dealing with an envelope here.

A Again, I'm sorry, what was your question exactly? Do I --

Q In your study, do you recall ever seeing an

envelope that was more than 15 and less than 18 inches long.

A I don't specifically remember measuring an envelope that was between 15 and 18 inches long.

Q From your experience in the envelope business, that's sort of an unusual length of an envelope, isn't it?

A Yes, it is.

Q Okay. So it's not because of the greater length of the envelope that causes you to conclude that this definition in the rural system for flats is broader than in the rest of the Postal Service, is it?

A Well, I don't believe you're asking me to get into this very deeply, but obviously mail pieces are delivered in many different formats other than envelopes and envelopes is only one of the means by which letters, flats and parcels are carried through the mail stream.

Q Okay.

A So I don't necessarily believe that you can make the clear connection between the size of envelopes and the size of pieces in the mail stream.

Q Okay. I guess what I'm getting at, though, is that we have determined that under the Postal Service's general definitions, there are flats that range from 6-by-nine all the way up to 12-by-15 which, under this system, are considered parcels, and I guess I'm asking you to compare the number of those envelopes that range in all

of those standard sizes that we discussed and compare that with the number of pieces which are considered parcels under the rural system because they exceed 3/4ths of an inch and come under 1 and 9/16ths of an inch and tell me which is larger, you think.

A It appeared to me, based on that parcel characteristic study, that the 3/4ths versus 1 and 9/16th inches wide number was of greater importance.

Q So you think there are more of those parcels that become -- I'm sorry -- there are more of those packages out there that become parcels -- I'm sorry -- that are not parcels under the rural system because of their thickness than there are envelopes which are considered parcels under the rural system because of their height?

A That was my belief, yes.

Q Okay. Still your belief?

A I guess I'm not convinced that that's not accurate.

Q I'm sorry, did you say you're convinced it's not accurate or you're not convinced --

A I am not convinced that that's -- I'm not convinced that my belief would change.

Q In other words, you think you're still right? There was a double negative, and I'm just trying to unscramble the double negative.

A Yes, I think you have characterized what I said accurately.

CHAIRMAN GLEIMAN: Mr. Olson, I assume from the shuffling of papers that you're moving on to a different area. Would this be a reasonable time to take a break?

MR. OLSON: Sure.

CHAIRMAN GLEIMAN: We're going to take a 15-minute break and come back at 25 after the hour.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Olson, it appears that all the players are back in place, and you can continue when you are ready.

BY MR. OLSON:

Q I want to, Mr. Crum, I want to return to the standard definition of what is a flat, what the maximum dimensions of a flat are, and ask you if you can tell me what those are again?

A The standard definition being the DMM, which is consistent with the IOCS handbook?

Q Correct.

A The maximum dimensions of a flat, that's -- that was our question?

Q Yes.

A A height of 12 inches, length of 15 inches, thickness of three-quarters of an inch.

Q If I were to give you an item like Mr. -- sort of like Mr. Reagan's, and ask you to tell me if it was a flat, could you attempt to do so?

A I could certainly attempt to do so. We give our people whose job is to do this, far more training than I have had in doing it. But I can certainly attempt to do so.

Q Okay. I have a box of Normal Rockwell Hallmark Christmas cards which I would like to hand ycu. There is nothing in the box. But ask you if you can tell me from the dimensions as to whether this qualifies as a flat?

CHAIRMAN GLEIMAN: We are all pleased to know what kind of Christmas cards we can expect from this year, Mr. Olson.

[Laughter.]

THE WITNESS: Okay. I measured it to be 11 inches by 8 and 3/4 inches by 7/8ths of an inch. Therefore, it would not qualify to be a flat.

BY MR. OLSON:

Q And for what reason would it not qualify to be a flat?

A Because of its thickness.

Q Okay. Not the other two factors?

A I believe it would be okay because of the other two factors.

Q Okay. Now, as you were talking to Mr. Wiggins

before, you said that you had a little collection of standard A parcels and had some experience with what went in, what was sent in the mails as standard A parcels, correct?

A Yes. A very small collection given the one billion pieces and the size of my desk.

Q Okay. But you -- you would say that greeting cards might be one item that you have come across before as being sent as a Standard A parcel?

A I have seen boxes of greeting cards sent as a standard A parcel, yes.

Q How about checks?

A Yes, I have seen check boxes mailed as standard A parcels.

Q Do you know what Nashua-District-Mystic-Seattle do in processing film?

A Well, Nashua District, Mystic and Seattle are four different companies, I believe, all with a slightly different kind of niche in the photo developing market.

Q But you know that sent -- send out a fair number of standard A parcels which predominantly would contain prints of photographs, for example, correct?

A Prints of photographs, for example, and I believe also undeveloped film. Maybe they mail that out --

Q Some, yes.

A I believe -- and some of that might go, I mean that's the returns, maybe come first class, but outbound, I believe it is maybe priority mailed to a downstream and then it is standard A from then on.

Q And we've determined that CDs are another item that is sent as Standard A parcels, correct?

A Yes, CDs also are in the Standard A mail stream.

Q All of the items we've just discussed -- do you have any idea how they are proportionally to other Standard A volume? In other words, do you think that constitutes a significant chunk of Standard A parcel volume, items like CDs and Christmas card and photo prints and check pads?

A My only way to estimate that would have been from our parcel characteristics study, which is, again, submitted as LR PCR-38 in the parcel reform case. That was my only attempt to get a national picture of that.

I guess if you're asking me the proportion, for example, of greeting cards, since this survey took place between April and May, there were likely a lower proportion of greeting cards than there might be in, say, November/December.

Q Same, perhaps, with photographic prints, which are seasonal.

A I haven't fully thought about the seasonality of photographic prints, but I assume that there would be some

seasonality in that, as well.

Q Let me show you another package and ask you to tell me whether you would adjudge this to be a flat, and I'm not giving anything from Norman Rockwell but, rather, something which is home-made for the purpose of today.

A Okay. I got that the length of that was 14 1/2 inches, the height is 11.5 inches, and the width is 5/8ths of an inch, and based on my imperfect understanding of how this all works, that would be a flat.

Q Have you, in your cost study, made any effort to determine the range of unit costs of handling flats or the range of unit costs of handling parcels? In other words, you have information on averages, but as to what the cheaper flats are and the cheaper parcels or the more expensive flats, the more expensive parcels.

A I have not made any significant effort to quantify the differences of that range for flats and parcels.

Q But you're aware of the fact, clearly, that some flats, for example, might cost less to handle than some -- excuse me -- some parcels might cost -- strike that. Do you believe that some -- excuse me -- some flats may cost more to handle than some parcels?

A Again, if you're talking about an individual flat costing more than an individual parcel, yes, that could certainly happen based on any number -- for any number of

reasons.

I guess it's theoretically possible that a given first-class letter, depending on what damage that did as far as jamming a machine, could cost more than a parcel post piece. That's theoretically possible.

So, yes, there's certainly the possibility that an individual flat could cost more than an individual parcel.

Q And isn't it true that an individual flat could cost more than an individual parcel even wholly apart from items such as transportation cost differences or -- in other words, if we were to assume the same condition of pre-sort and the same point of entry, that that could be true.

A Yes. There's nothing in my testimony to say that an individual flat might not -- might cost more than an individual parcel. There's nothing in my testimony to negate that possibility.

Q Have you considered in your testimony or at all the possibility that mailers which, for the first time, would be subject to a 10-cent-per-piece surcharge would attempt to repackage their goods so as to have them classified as flats, items that otherwise would be parcels under the definitions being proposed by the Postal Service would be repackaged to classify as flats.

A Back to the first part of your question, have I thought about that? Is that -- yes, that -- that -- I have

thought about that possibility. That is not in my testimony or in my analyses.

Q As a cost witness, does that possibility concern you?

A I guess the way I thought about that was at the level of a 10-cent surcharge that the mailer would not create more costs of the change they would make than that 10-cent surcharge, and if by redoing their packaging they lowered the cost to the Postal Service, then that would not -- then that would be a good thing.

Q Okay. But I'm asking you to consider the possibility for just a second that in repackaging their goods so as to be considered flats and not subject to the surcharge that they might result in a package which is more costly for the Postal Service to handle. Could that be true?

A Again, repackaging is an extremely complicated subject, and the more deeply you think about it, the more complicated it gets. Again, there are many, many different types of Standard A flats and parcels, and repackaging for one industry could be very different than repackaging for another. I assume what you say is possible for some areas of Third Class mail, but again I would need to think about that more. And repackaging is a very complicated subject here.

Q Well, I'll concede that if you're packaging a Rubik's cube that you cannot repackage that into a flat shape; correct?

A That would be very difficult; yes.

Q Okay. On the other hand, if you have a mailing of Christmas cards or photographic prints or check pads or CDs it is possible with those kinds of stackable products to array them differently within a container, is it not, to -- particularly if the thickness is the problem in being classified as a parcel.

A Yes, and let me just talk about that for a second. You specifically mentioned check padding. I know of one instance, and I believe this is one of the pieces I have back in my desk, the mailer inserted maybe that much of filler packaging such that they would have just packed it smaller because of how cube and density impact our costs. They stuck in maybe an inch or so, maybe more, I'm not remembering exactly, of basically cubing just to fill up their box, so they right now are acting in ways that cause negative cost consequences for the Postal Service.

So if they were to repackage and just eliminate that one inch of extra packaging that actually knock them to a different -- it would then have been a flat and then they would not pay the surcharge, and our costs would be lower. So in that example this would create positive changes in

mailer behavior.

Q Okay. I understand how that would be a positive change in mailer behavior in terms of reducing the Postal Service's costs. But I'm asking you to discuss with me the likelihood that changes in mailer behavior would increase Postal Service costs, and perhaps you can take that white box there to your side which you've identified as a flat and tell me whether you cannot visualize mailers repackaging items such as CDs and Christmas cards and photo prints and check pads into that sort of very large flat-shaped container or packaging and whether you think that would have an implication for Postal Service costs.

A I don't believe that would have a negative cost implication for Postal Service costs. But, again, that is a very complicated subject and you are talking about a number of different items moving to potentially a number of different shapes. I guess I am not coming up with examples I see where that would increase Postal Service costs.

Q Okay, well, let's think about casing that flat. Would you hold that up for a second and see if you think that might be a little more difficult to case? Have you ever seen a rural case?

A I have not seen a rural case while it was being used. I believe I have seen a rural case. But I have not seen mail being cased into a rural case.

Q Do you know the maximum height dimension on a pigeon hole in a rural case?

A The height dimension? Geez, it's kind of something like that, maybe. I don't know. I don't remember off hand.

CHAIRMAN GLEIMAN: Mr. Crum, when you say "kind of like that," since you have a ruler in front of you, maybe you could, you know, give us something that is a little less graphic and can translate into the transcript.

THE WITNESS: I'm sorry. I'm trying to translate my visual memory into a number and I hesitate to give a number because I'm uncertain. I could perhaps give a range if that would be helpful.

CHAIRMAN GLEIMAN: A range would be fine. It certainly is better than "something like that."

THE WITNESS: Yes, I'm sorry.

It seemed in the half a foot area, if I'm remembering correctly and I am not guaranteeing that I am remembering that correctly.

BY MR. OLSON:

Q I'm not sure, I think it might be around nine inches, as I recall, but irrespective of which of those numbers you use, do you think it might be a problem to case the white flat that we provided you today, more of a problem casing that then, say, a pack of checks in the -- in this

sort of size?

And I'm not helping the record either, but this is slightly more than a personal check size that may have, in the example you saw, include the additional filler material and I guess I, for the record, should ask you to measure this one. I'm going to hold it up.

CHAIRMAN GLEIMAN: Well, I think maybe if we just identify it as one of those standard boxes that checks come in, maybe 200 checks in a box or something like that, that will suffice for our purposes right now.

THE WITNESS: Again, you are asking me about the changes in mailer behavior and how those would impact rural casing of mail? Was that --

BY MR. OLSON:

Q Postal Service costs generally and now just for -- you said you couldn't think of any way in which repackaging could have an adverse effect on Postal Service costs and I'm challenging that and I am giving you a suggestion that it might be easier to case this in a rural case than it would be -- and "this" meaning the check box, the small check box -- than the white item that is around 14-1/2 by 11-1/2 by 3/8, I think you said.

A I would say in that case -- I would say in that particular case, your presumption does seem reasonable to me. I would have to think more clearly about that. But

based on a surface level thinking, that presumption does seem basically reasonable.

Q Okay. How about city carrier costs. Can you picture putting that in -- the white envelope in a satchel?

A Boy, I've seen carriers, city carriers do so many different things, I can't imagine -- I don't even want to guess how an individual carrier might do that or how that might translate into nationally representative numbers.

Q So you, with respect to the smaller check size box versus the larger white box, you have no opinion as to the effect that might have on delivery costs?

A My only view is that I -- again, this is a very small sample of what -- I'm just saying what I have seen. That they would not case a check box of that thickness. Perhaps if it were thinner, they would. And, again, that varies based on the individual carriers.

As far as this, I don't remember seeing a piece such as this so I really have no way whatsoever to guess, to even fathom a guess as to how this might be handled by a city carrier.

Q I'm suggesting you might see a lot more of those pieces and I am trying to get you to think about the cost implications. Is there any other guidance you can give us as to whether you think that the large white package -- areas where the large white package might have an

adverse effect on Postal Service costs?

A You're saying, and again, this is -- your presumption is that that check box is turning into this white package. I haven't fully thought through all those or even if that is a logical -- if this would be a logical packaging choice for check boxes.

Certainly, if they could turn it into a thin 8-1/2 by 11 piece, that would probably result in cost savings. So again, there would be many examples of how mailers might reconstruct their packages and it would be my hope that they would reconstruct their packages in ways that would be beneficial. Although they certainly, a given mailer could theoretically do that in ways that aren't beneficial.

Q Okay. Let's -- the white box, which is a flat, is nonetheless a box shape, correct, with square sides.

A Yes.

Q Okay. And now you're postulating that mailers might use, I think you said, 8 1/2 by 11, something in that range of flat size to repackage, and I actually have one of those to discuss with you, and I -- this is just a made-up exhibit, also, but it is one that contains photographic prints that are dummy prints that were provided to us by our client, and it was an effort to see what side-by-side packaging of stackable items might look like with a center divide so that the pictures don't fall onto each other, and

it results in this configuration of a flat, and first of all, I'll ask you if you can measure this for me and confirm it's a flat and, secondly, if you could give me some thoughts about costs associated with casing this.

A Okay. I get that that is a length of 12, a height of 9 inches, and a width of 3/8ths of an inch, which would define it as a flat.

Q Okay. How about your thoughts about the Postal Service costs of handling such a piece repackaged to avoid the 10-cent surcharge, if you could pick that up and see what you think might be involved in casing, delivering, putting it in a satchel.

A You're talking about comparing, for example, maybe one of these in a -- what we might think of as a film envelope together, as opposed to this being separately done this way?

Q Well, I have not an infinite number of exhibits, but a typical kind of mailing from, in this case, York Photo Labs, which is an envelope that's somewhere in the six-by-nine-inch range, and yet -- you can take my word for it, I think, that it exceeds somewhat the three-quarter-inch --

A Right. I think we can just call that a standard film envelope.

Q -- you know, gussetted side, and the alternative

is either to send this, paying a 10-cent surcharge, or to print the prints in -- side by side into that item or this item, which are the same.

This is -- pay no attention to the fact we used one of your priority mail envelopes to create our exhibit, but this is what I'm asking, if you'd considered the costs of, for example, casing this.

A Okay. Since this is a -- since this piece is a future or a theoretical example of what might have happened, I obviously have not seen these being cased, and given my -- given the different opinions and discussions I've had with city carriers and their different beliefs, I don't really have any good estimate of how this would be cased or how that would work.

Back to the film envelopes --

Q Let me just ask you this one thing.

A Okay.

Q You just said that you didn't see those envelopes, and clearly, I think that's a reasonable observation, that the center divide packet envelopes are something that now there's no cost incentive to create, correct?

A Yes. There would be no reason for that -- based on the current rates, there would be -- I don't -- I can't think right now of a reason for a mailer -- why a mailer would be encouraged to do this.

Q Okay. But the main purpose of the parcel surcharge in terms of affecting mailer behavior would be to cause mailers to generate lower cost to handle pieces, would it not?

A I don't really want to get into the purpose of the surcharge.

MR. OLSON: Okay. I withdraw the question.

That's all I have, Mr. Chairman.

CHAIRMAN GLEIMAN: Is there any follow-up cross examination?

[No response.]

CHAIRMAN GLEIMAN: There doesn't appear to be any.

Questions from the bench?

[No response.]

CHAIRMAN GLEIMAN: Mr. Reiter, would you like some time to prepare for redirect?

MR. REITER: Yes, we would, Mr. Chairman.

CHAIRMAN GLEIMAN: Ten minutes?

MR. REITER: That would be fine.

CHAIRMAN GLEIMAN: Okay.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Reiter, whenever you are ready.

MR. REITER: Thank you, Mr. Chairman.

REDIRECT EXAMINATION

BY MR. REITER:

Q Mr. Crum, did you have a chance to check on what the height of a rural carrier slot case is, the slot in the rural carrier case -- I'm sorry.

A Yes, I did.

Q And would you tell us what that is?

A It's five inches.

Q How does that affect the discussion that you had earlier with Mr. Olson concerning the dimensions that were used in the rural carrier cost system to determine whether an item is a flat or a parcel?

A I guess it would affect it by, if you go to my attachment to the response to NDMS-T-28-3, on page 5 of that attachment, if you go down to where it says flat-shaped mail, it says that flat-shaped mail consists of newspapers, magazines, catalogs, rolls and other pieces exceeding letter size dimensions that can be cased for delivery within that rural carrier case -- for example, magazines that you fold over to fit into that case.

I believe what Mr. Olson was talking about for his dimensions of parcel shaped mail, again if you go to page 58, have to deal with rigid pieces that cannot be folded over and placed into that case.

MR. REITER: Thank you. That's all I have, Mr. Chairman.

CHAIRMAN GLEIMAN: Is there any recross?

[No response.]

CHAIRMAN GLEIMAN: If there is none, then I want to thank you, Mr. Crum. We appreciate your appearance here today and your contributions to our record and if there is nothing further, you are excused.

THE WITNESS: Thank you.

[Witness excused.]

CHAIRMAN GLEIMAN: We are going to press ahead and see if we can finish up with our next witness.

Our next witness is Carl G. Degen, who is already under oath.

Mr. Koetting, when he gets situated, if you would formally introduce him.

Whereupon,

CARL G. DEGEN,

a witness, was called for examination by counsel for the United States Postal Service and, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KOETTING:

Q Do you have before you a document entitled, "Supplemental Testimony of Carl G. Degen on behalf of the United States Postal Service" which has been designated as USPS-ST-47?

A Yes, I do.

Q Are you familiar with that document?

A Yes, I am.

Q Does ST-47 incorporate certain pages which were previously filed in this case as part of Library Reference H-89?

A Yes, it does.

Q You previously presented USPS-T-12 as your direct testimony on the IOCS in this proceeding, correct?

A That's correct.

Q Now do you recall the statement on page 2 of USPS-T-12, lines 4 through 5, which reads, "Details of the IOCS sample design are in Library Reference H-89" --

A Yes, I do recall that.

Q Does ST-47 incorporate the details of the IOCS sample design from Library Reference H-89 that you were citing in that portion of your direct testimony, T-12?

A Yes, it does.

Q Are you prepared to formally sponsor ST-47 as your testimony in this proceeding?

A Yes, I am.

Q If you were to testify orally today on the details of the IOCS sample design, would that be your testimony -- what is included in USPS-ST-47?

A Yes, it would.

MR. KOETTING: Mr. Chairman, I have handed the Reporter two copies of the supplemental testimony of Carl G. Degen on behalf of the United States Postal Service, USPS-ST-47, and request that it be moved into evidence.

CHAIRMAN GLEIMAN: Are there any objections?

[No response.]

CHAIRMAN GLEIMAN: Hearing none, Mr. Degen's testimony and exhibits are received into evidence, and I direct that they be accepted into evidence.

As is our practice, they will not be transcribed into the record.

[Supplemental Testimony and Exhibits of Carl G. Degen, Exhibit No. USPS-ST-47, was marked for identification and received into evidence.]

CHAIRMAN GLEIMAN: Mr. Degen, have you had an opportunity to examine the packet of designated written cross examination that was made available to you earlier today?

THE WITNESS: Yes, I have.

CHAIRMAN GLEIMAN: If these questions were asked of you today, would your answers be the same as those you previously provided in writing?

THE WITNESS: Yes, they would.

CHAIRMAN GLEIMAN: That being the case, we are going to provide two copies of the designated written cross examination of Witness Degen to the Reporter and I will direct that they be accepted into evidence and transcribed into the record at this point.

[Designation of Written Cross-Examination of Carl G. Degen, USPS-ST-47, was received into evidence and transcribed into the record.]

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 1997 Docket No. R97-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF UNITED STATES POSTAL SERVICE
WITNESS CARL G. DEGEN
(USPS-ST47)

Party	Interrogatories
Alliance of Nonprofit Mailers	ANM/USPS-ST47-1-5 ANM/USPS-ST44-10 redirected to ST47
Direct Marketing Association, Inc.	ANM/USPS-ST47-1-5 ANM/USPS-ST44-10 redirected to ST47 DMA/USPS-T12-13-26
Office of the Consumer Advocate	ANM/USPS-ST47-1-5 ANM/USPS-ST44-10 redirected to ST47

Respectfully submitted,

Margaret P. Crenshaw

Margaret P. Crenshaw
Secretary

INTERROGATORY RESPONSES OF
UNITED STATES POSTAL SERVICE
WITNESS CARL G. DEGEN (ST47)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory:	Designating Parties:
ANM/USPS-ST44-10 rd. to ST47	ANM, DMA, OCA
ANM/USPS-ST47-1	ANM, DMA, OCA
ANM/USPS-ST47-2	ANM, DMA, OCA
ANM/USPS-ST47-3	ANM, DMA, OCA
ANM/USPS-ST47-4	ANM, DMA, OCA
ANM/USPS-ST47-5	ANM, DMA, OCA
DMA/USPS-T12-13	DMA
DMA/USPS-T12-14	DMA
DMA/USPS-T12-15	DMA
DMA/USPS-T12-16	DMA
DMA/USPS-T12-17	DMA
DMA/USPS-T12-18	DMA
DMA/USPS-T12-19	DMA
DMA/USPS-T12-20	DMA
DMA/USPS-T12-21	DMA
DMA/USPS-T12-22	DMA
DMA/USPS-T12-23	DMA
DMA/USPS-T12-24	DMA
DMA/USPS-T12-25	DMA
DMA/USPS-T12-26	DMA

Response of United States Postal Service Witness Degen
to Interrogatories of the Alliance of Nonprofit Mailers

ANM/USPS-ST47-1

Please refer to the discussion in LR-H-146, p. II-3, of distribution items where the contents are counted.

a. When an IOCS tally is taken and the clerk or mailhandler is handling an item of mixed-mail, for which types of items and under what conditions is the mixed-mail counted?
b. Suppose a clerk is handling an item such, as a sack, that contains other items, such as bundles, of mixed-mail. When a tally is taken under such circumstances, (i) is all mail in the sack counted, or (ii) is the mail in selected bundles within the sack counted?
c. Please explain if there are situations involving items where mixed-mail may, or may not, be counted.

ANM/USPS-ST47-1 Response.

a. The Top Piece Rule applies to mixed-mail bundles, letter trays, and flat trays. IOCS data collectors are instructed to record in question 24 (if possible) the contents of mixed-mail items of other types, i.e., parcel trays, con-cons, pallets, sacks, and pouches. Please see Tr. 12/6456-6461, Tr. 12/6542-6543, and Tr. 12/6548-6549 for additional discussion.

b. The instructions are to count all of the mail in the sack if possible. Please see LR-H-49, pages 90-91.

c. Please see the response to part a.

Response of United States Postal Service Witness Degen
to Interrogatories of the Alliance of Nonprofit Mailers

ANM/USPS-ST47-2

When an IOCS tally is taken and the clerk or mailhandler is handling a container of mixed-mail, are there types of containers or conditions under which the mixed-mail is counted? If so, please describe.

ANM/USPS-ST47-2 Response.

Mixed-mail containers are not "counted" in the way that mixed-mail items are counted. See USPS-T-12, page 9, for a definition and brief description of "identified" containers, and Tr. 12/6298-6299 for additional discussion.

Response of United States Postal Service Witness Degen
to Interrogatories of the Alliance of Nonprofit Mailers

ANM/USPS-ST47-3

At page II-2 of LR-H-146, a note states that IOCS tallies are divided into three facility types: MODS 1&2, BMCS, and NON-MODS. Can counted mixed-mail tallies be taken at any of these three types of facilities, or is counting of mixed-mail restricted to one or two types of facilities?

ANM/USPS-ST47-3 Response.

Yes, counted mixed-mail tallies can be (and are) taken at all three types of facilities. See, e.g., the "counted items" columns of spreadsheets DMA15mod.xls, DM15modp.xls, DMA15bmc.xls, and DMA15nmd.xls, in LR-H-305.

ANM/USPS-ST47-4

a. When mixed-mail is counted for purposes of creating an IOCS tally, are separate "tallies" created for each subclass of mail, or is all information concerning the mail count recorded in a single tally?
b. If counting of mixed-mail results in creation of more than one "separate tally", please provide the total number of such mixed-mail tallies included in the tallies in LR-H-23 for Standard A (i) Regular ECR, (ii) Regular non-ECR, (iii) Nonprofit ECR and (iv) Nonprofit non-ECR.
c. The total number of "separate" counted mixed-mail tallies for Standard A mail represents how many actual individual, independent observations by an IOCS tally clerk?

ANM/USPS-ST47-4 Response.

a. See Tr. 12/6302 and Tr. 12/6304.

b. See the table below.

c. See the table below.

Counted item records in FY 1996 IOCS tally file (LR-H-23)
Standard Mail (A) categories

Category	Count
Standard (A) Bulk Regular, ECR	49
Standard (A) Bulk Regular, Other	217
Standard (A) Nonprofit, ECR	9
Standard (A) Nonprofit, Other	53
# of unique counted item tallies associated with above records	215

Response of United States Postal Service Witness Degen
to Interrogatories of the Alliance of Nonprofit Mailers

ANM/USPS-ST47-5

Do mail processing IOCS tallies in LR-H-23 include counted mixed-mail tallies? If so, please identify and describe all fields that distinguish counted mixed-mail tallies from direct tallies that deal only with one class of mail (e.g. single-piece tallies, or tallies where all the mail in the item or container is identical).

ANM/USPS-ST47-5 Response.

Yes, mail processing IOCS tallies include counted mixed-mail tallies; please see Tr. 12/6226, Tr. 12/6231-6232, and my responses to ANM/USPS-ST47-3 and ANM/USPS-ST47-4 part b. See page II-3 of LR-H-146 for the criteria with which item and container tallies are distinguished from single piece tallies. Counted item tallies may be identified by a nonblank entry in field F9253B. Identical mail items and containers may be identified using fields F9216 and F9220. See the hardcopy documentation to LR-H-23 for additional description of these fields.

Response of United States Postal Service Witness Degen
to Interrogatories of the Alliance of Nonprofit Mailers
(Redirected from Witness McGrane)

ANM/USPS-ST44-10. In the current case, does the Postal Service's cost distribution methodology, as refined in the distribution keys used by witness Degen to develop Base Year 1996 volume variable costs by class and subclass, embody the principles discussed in VP-CW/USPS-ST44-23? Please discuss why they do or do not, explaining fully each step in you (sic) reasoning in plain English.

RESPONSE

I understand that witness McGrane received an interrogatory numbered VP-CW/USPS-ST44-23. However, since VP-CW/USPS-ST44-23 and the present interrogatory were filed on the same day, I do not believe that you meant to refer to VP-CW/USPS-ST44-23. I assume that you actually meant to refer to interrogatory VP-CW/USPS-ST44-2. That interrogatory requested a discussion of "the theory that underlies the use of IOCS tallies to study the effect of weight on mail processing costs of Standard A mail."

The primary purpose of IOCS is to estimate the cost associated with time spent by various types of employees performing different functions (see USPS-T-12, page 1). All cost segments and components that depend on IOCS use some form of this general approach, with the specific definitions of "types of employees" and "functions" depending on the cost segment or component being considered. In the case of the new mail processing (Cost Segment 3.1) distribution methodology, the "types of employees" are, of course, clerks and mailhanders, and the "functions" include handling mail of particular subclasses, handling "mixed mail," and other (or "not-handling-mail") work, in each of the mail processing cost pools. Only relative proportions of IOCS costs are used to generate the distributed volume-variable mail

processing costs, since the volume-variable costs themselves are derived from the Pay Data System and the MOD System. The subclass distribution of certain sets of IOCS "direct" costs are, furthermore, used to estimate the unobserved subclass distribution of certain mixed-mail costs, and to identify appropriate distributions to subclass for the not-handling-mail costs. The "subclasses" reported in the Base Year CRA are themselves composites of more detailed activities, such as handling mail of particular subclasses, shapes and/or weights. Thus, estimates of mail processing costs by characteristics other than subclass, or in addition to subclass, also fall under the same general approach.

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DMA/USPS-T12-13. Please refer to LR-H-146, Table I-1, which shows accrued costs by cost pool.

a. Please confirm that the IOCS tally costs for tallies within a mail processing cost pool are not always equal to the accrued cost for the cost pool.
b. Please provide, in an electronic spreadsheet format, the percentage difference between IOCS tally costs and accrued costs for each mail processing cost pool.
c. Could a cost difference of the magnitude indicated in your response to subpart (b) be due solely to IOCS sampling error? If so, what is the probability that a cost difference of this magnitude is due to IOCS sampling error?
d. Could a cost difference of the magnitude indicated in your response to subpart (b) be due solely to differences in salaries between individual clerks and mailhandlers? If so, please explain fully the likelihood that the cost difference is due solely to this reason.
e. Is there any other possible reason for the difference between IOCS tally costs and accrued costs within a cost pool? If so, please explain fully.
f. Assume: (1) clerks and mailhandlers sometimes work on one operation while clocked into another operation, and (2) IOCS data collectors sometimes record the MODS operation that the employee is performing rather than the MODS operation into which the employee is clocked. Could this situation result in a difference between IOCS tally costs within a cost pool and accrued costs in the same cost pool? If no, please explain.

DMA/USPS-T12-13 Response.

a. Confirmed. Please see Tr. 12/6496-7, Tr. 12/6527-8, and Tr. 12/6557-8 for further discussion.

b. The requested data will be filed as spreadsheet DMA-13b.xls, LR-H-304. For each of the cost pools, the spreadsheet also provides standard errors of the IOCS tally costs, which are employed in my response to part c of this question. Note that the LDC 15 cost pool has been excluded. The

vast majority of LDC 15 costs are booked at Remote Encoding Centers (RECs), but RECs are not sampled in IOCS, so the tally and cost pool costs do not measure the same quantity.

c. It is unlikely that the differences are due solely to sampling error. I would conclude that the difference could be due to sampling error alone if most or all of the cost pool costs were to fall within a reasonably-defined confidence interval around the corresponding IOCS tally costs. In spreadsheet DMA-13b, I have provided coefficients of variation with which this comparison can be made. The cost pool costs fall within the 95% confidence interval for the IOCS tally costs if the percentage difference (column 3) is less than the "1.96*CV" value (column 6) in absolute value. The cost pool costs fall within the 99% confidence interval for the IOCS tally costs if the percentage difference (column 3) is less than the "2.57*CV" value (column 7) in absolute value. The column 6 and/or 7 entries have been shaded for cost pools where the cost pool costs fall within the IOCS cost confidence interval.

Although several MODS cost pools fall within the confidence intervals, the majority of the MODS cost pool costs fall outside the 99% confidence intervals. The conclusion is that the differences between the cost pool costs and the corresponding IOCS tally costs are greater than can be attributed to IOCS sampling error. Note, however, that the total

MODS cost pool costs fall within the 95% confidence interval for the corresponding IOCS costs.

The BMC and Non-MODS cost pool costs are simply reweighted IOCS tally costs. The discrepancy between the BMC cost pool and tally costs is discussed at Tr. 12/6557-8. The difference between the BMC tally and cost pool costs is not statistically significant—the coefficients of variation are more than 10 times larger than the discrepancy. A difference between the BMC and Non-MODS costs is that the BMCs constitute a separate CAG for the purpose of the IOCS tally cost weighting process. Thus, total BMC clerk and mailhandler tally costs should sum to the total amount in the Trial Balance clerk and mailhandler compensation accounts for the BMC finance numbers. In the case of the Non-MODS office group, no such relationship holds, because a portion of CAG A-E costs are in Non-MODS offices and the remainder are in MODS offices. Thus, the total IOCS clerk and mailhandler tally costs for the Non-MODS office constitute an estimate of the corresponding Trial Balance costs. However, the Non-MODS cost pool cost falls outside the 99% confidence interval for the IOCS costs, so it is improbable that this difference is due solely to sampling error.

d. I do not believe that the differences between tally costs and cost pool costs are due solely to differences in salaries between individual clerks

and mailhandlers. My answer to part c of this question indicates that there are certain cost pools for which the difference could simply be the result of sampling error. However, I believe that differences in the implicit wage rates employed by the IOCS tally cost allocation system and the MODS-based cost pool formation system can explain much of the remaining differences.

Both the IOCS cost allocation system and the MODS-based cost pool system can accommodate variations in wage rates within mail processing to some extent. IOCS does this primarily by allocating costs to tallies separately for each craft (and CAG). In the case of mail processing, the craft categories are full-time clerks, part-time clerks, and mailhandlers. This approach recognizes that the average clerk wage is different from the average mailhandler wage. However, the IOCS cost weighting system does not account for variations in wage rates within crafts: an assumption built into the IOCS tally dollar weights is that all units of time for a given craft/CAG combination have the same cost. This is a limitation of the IOCS cost weighting mechanism since there are, indeed, within-craft variations in wage rates. The cost associated with a unit time for a full-time clerk at a CAG A office keying at an LSM or FSM (LDC 12) is higher than the cost associated with a full-time clerk at a CAG A office operating an OCR or BCS (LDC 11). (Clerks working

LDC 11 operations (BCS and OCR) are predominantly Level 4, while clerks working LDC 12 operations (LSM and FSM) are paid at the higher Level 6 rate.) In effect, the tally dollar values are too low for the LDC 12 tallies and too high for the LDC 11 tallies. The IOCS tally costs would therefore tend to underestimate costs for LDCs where craft wages are higher than average (e.g., LDC 12) and overestimate costs for LDCs where craft wages are lower than average (e.g., LDC 11). Note that the proportions of time within the operations are correctly measured, so that it is appropriate to use the IOCS tally costs to form cost pool-specific distribution keys, as in the new cost distribution methodology.

In contrast, the MODS-based cost pool system accounts for wage variations by LDC by design. This is because the MODS cost pool amounts are based on Pay Data System compensation totals by LDC. Since the craft mix of employees varies by LDC, the MODS-based system can accurately reflect differences in wage rates by craft. It also accounts for wage variations within craft, since such variations generally occur across LDCs.

e. Yes. If the MODS operation number recorded on the tally is associated with a different cost pool than the MODS operation number that the employee was actually working, a difference between the IOCS costs and accrued costs for the cost pools would result (other things equal). A

related issue is that a small fraction of the MODS tallies lack a valid MODS operation number. The "remap" section of program MOD1POOL attempts to predict the clocked-in MODS cost pool for such tallies based on the employee's recorded activity; there is the possibility of prediction error, but the small number of affected tallies indicates that this can only result in small differences (see Tr. 12/6272-4; 6391). Different computer programs are used in the BY 1996 cost pool formation and IOCS tally cost weighting processes; small numerical differences between these programs can result in differences between cost pool amounts and corresponding IOCS costs for the BMC and Non-MODS office groups (see the response to part c, above, and Tr. 12/6557-8).

f. Yes. See the response to part e, above.

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DMA/USPS-T12-14. Please refer to LR-H-146, page II-3, step 2, where you discuss the distribution of uncounted/empty single items. Please disaggregate uncounted/empty item unweighted tally counts, IOCS tally costs, and volume-variable costs by (1) item type, (2) cost pool, (3) whether the item is uncounted or empty. Please provide this information in an electronic spreadsheet format.

DMA/USPS-T12-14 Response.

The requested data will be filed as spreadsheet DMA-14.xls, LR-H-304.

DMA/USPS-T12-15. Please refer to Library Reference LR-H-146, page II-3, Step 2.

a. (1) Individually for each item type and loose shape, how many unique distributing sets did you use to distribute (nonzero) mixed mail costs to subclass/special service? If you used a distributing set based upon direct item tallies across all MODS cost pools (within item type) as a distributing set (because there were no direct tallies within cost pool and item type) for more than one cost pool, count this distributing set as one unique set.

(2) For each item type, how many of the distributing sets identified in subpart (1) distributed mixed mail costs based upon direct item tallies within cost pool?

(3) For each item type, how many of the distributing sets identified in subpart (1) distributed mixed mail costs based upon direct item tallies across cost pools?

(4) Individually for each item type and loose shape, how many distributing sets were unnecessary because there were no mixed mail costs in the distributed set?

(5) Please confirm that if you add the number of distributing sets from subpart (1) across item types and loose shapes, the sum will be the number of distributing sets used to distribute mixed mail costs to subclass. If you cannot confirm, please explain why and provide the number of mixed mail distributing sets.

b. Individually for each unique distributing set identified in subpart (a)(1), please provide in an electronic spreadsheet format:

(1) the name of the cost pool of the mixed mail costs being distributed,
(2) the item type/loose shape,
(3) whether the distributing set is based upon direct tallies within cost pool, direct tallies across cost pools because there were non direct tallies within cost pool, or direct tallies across cost pools for another reason,
(4) the number of top piece rule tallies, the top piece rule tally cost, and the top piece rule volume variable cost in the distributing set,
(5) the number of counted item tallies, the counted item tally cost, and the counted item volume variable cost in the distributing set,
(6) the number of identical item tallies, the identical item tally cost, and the identical item volume variable cost in the distributing set,
(7) the number of direct piece handling tallies, the direct piece handling tally cost, and the direct piece handling volume variable cost in the distributing set,

(8) the number of uncounted item tallies, the uncounted item tally cost, and the uncounted item volume variable cost in the distributed set,
(9) the number of empty item tallies, the empty item tally cost, and the empty item volume variable cost in the distributed set,
(10) the number of identified container tallies, the identified container tally cost, and the identified container volume variable cost in the distributed set,
(11) the number of unidentified container tallies, the unidentified container tally cost, and the unidentified container volume variable cost in the distributed set, and
(12) the number of empty container tallies, the empty container tally cost, and the empty container volume variable cost in the distributed set.

c. Please provide, in an electronic spreadsheet format, the estimated coefficient of variation and lower and upper 95 percent confidence limits for the costs for each subclass used to develop each distributing set identified in subpart (a)(1). (For example, the distributing set for uncounted/empty letter trays in the letter sorting machine cost pool is direct letter tray costs in that cost pool. For this distributing set, please provide the coefficient of variation and confidence limits for direct letter tray costs by subclass.) Please also provide the formulae used to calculate these statistics, and describe any assumptions necessary in order to apply them.

DMA/USPS-T12-15. RESPONSE:

a. (1)-(4) The requested information can be obtained from the data in spreadsheets DMA15mod.xls, DM15modp.xls, DMA15bmc.xls, and DMA15nmd.xls, which will be filed as part of LR-H-305.

(5) Not confirmed. The total number of distributing sets of tallies from subpart (1) is the number of distributing sets used to distribute uncounted and empty (i.e., "mixed-mail") items to subclass. Additional distribution keys are formed to distribute unidentified and empty containers to subclass; see the response to DMA/USPS-T12-16.

b. (1)-(10) The requested data can be obtained from the data in spreadsheets DMA15mod.xls, DM15modp.xls, DMA15bmc.xls, and DMA15nmd.xls, which will be filed as part of LR-H-305. Note that to provide full detail for subparts (1) and (8)-(10), there is one record per distributed set.

(11)-(12) There are no unidentified or empty containers in the distributed sets of tallies to which the shape/item distribution keys are applied. Such tallies are distributed to subclass in a separate step. See the response to DMA/USPS-T12-16.

c. Data with which the requested coefficients of variation can be computed may be found in spreadsheet DMA15c.xls, which will be filed as part of LR-H-305. This spreadsheet provides IOCS tally costs and estimated variances by cost pool, shape or item type, and subclass. (Because of time and computer constraints, it was not possible to determine variances for the distributing sets per se. It will be necessary to sum the variances over cost pools for certain cost pool/item combinations.) The methodology and formulas are the same as that described by witness Steele in Docket No. R94-1, at Tr. 1/56-58. The coefficients of variation you requested, on their own, can give a misleading impression of the reliability of the distribution procedure. This is because the distribution key entries are ratios of IOCS tally costs; the variance of a ratio will be relatively small if the numerator and denominator are highly correlated. Note that the variance of the distributed mixed-mail item costs is:

$$\text{var}\left[\left(\frac{\text{tally costs in distributing set, subclass i}}{\text{total tally costs in distributing set}}\right) \times \text{costs to be distributed}\right].$$

Since this is the variance of a product of random variables, and the numerator and denominator of the term in parentheses are not independent, the exact variance is intractable. From the data you requested, it is possible to estimate the variance of the total tally costs in each distributing set, and then apply an approximation procedure such as that described at pages IX-3 to IX-4 of LR-H-146, to calculate estimated variances for the distribution key entries—i.e., the ratio in parentheses above.

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DMA/USPS-T12-16. Please refer to LR-H-146, page II-3, Step 3.

a. (1) Individually for each container type, how many unique distributing sets did you use to determine the item type/loose shape makeup of unidentified/empty containers? If you used a distributing set consisting of tallies across all MODS cost pools (within container type) as a distributing set for unidentified/empty container costs (because there were no identical or identified container tallies within cost pool and container type) for more than one cost pool, count the distributing set as one unique set.

(2) For each container type, how many of the sets identified in subpart (1) distributed unidentified/empty container costs based upon tallies within cost pool?

(3) For each container type, how many of the sets identified in subpart (1) distributed unidentified/empty container costs based upon tallies across cost pools?

(4) Individually for each container type, how many distributing sets were unnecessary because there were no unidentified/empty container costs in the distributed set?

(5) Please confirm that if you add the number of distributing sets from subpart (1) across container types, the sum will be the number of distributing sets used to identify the items and loose shapes in unidentified/empty containers. If you cannot confirm, explain why and provide the number of distributing sets for identifying the contents of unidentified/empty containers.

b. Individually for each unique distributing set identified in subpart (a)(1), please provide in an electronic spreadsheet format:

(1) the name of the cost pool of the mixed mail costs being distributed,
(2) the container type,
(3) whether the distributing set is based upon tallies within the cost pool, tallies across cost pools because there were no identified or identical container tallies within cost pool, or tallies across cost pools for another reason,
(4) the number of identical container tallies, the identical container tally cost, and the identical container volume variable cost in the distributing set,
(5) the number of identified container tallies, the identified container tally cost, and the identified container volume variable cost in the distributing set,

(6) the number of unidentified container tallies, the unidentified container tally cost, and the unidentified container volume variable cost in the distributing set,
(7) the number of empty container tallies, the empty container tally cost, and the empty container volume variable cost in the distributed set.

DMA/USPS-T12-16. RESPONSE:

a. Note that the container distribution programs (MOD3CONT, BMC3, and NONMODS3, in LR-H-146) do not construct shape/item distributions for unidentified/empty containers. Rather, they construct subclass distributions based on sets of tallies consisting of the identical container tallies and identified container tallies (the latter distributed to subclass) of the same container type.

(1)-(4) The requested information can be determined from the data supplied in spreadsheets DMA16mod.xls, DMA16bmc.xls, and DMA16nmd.xls, which will be filed in LR-H-305.

(5) Not confirmed. The total from subpart (1) is the number of distributing sets of tallies used to distribute unidentified/empty container costs to subclass, not to shapes and/or item types.

b. (1)-(7) The requested data may be found in spreadsheets DMA16mod.xls, DMA16bmc.xls, and DMA16nmd.xls, which will be filed in LR-H-305. To provide the full detail for subparts (1) and (7), there is one record for each distributed set in the spreadsheets.

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DMA/USPS-T12-17. Please refer to LR-H-146, Part 1, where you describe your method for determining accrued mail processing costs by cost pool. Please provide, in an electronic spreadsheet format, BY 1996 mail processing IOCS tally counts, IOCS tally cost, and volume variable cost by cost pool and shape (e.g., cards, letters, flats, IPPs, parcels). For tallies with no shape information, please identify these tallies as having no shape information.

DMA/USPS-T12-17. RESPONSE:

The requested data may be found in spreadsheet DMA-17.xls, which will be filed as LR-H-305.

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DMA/USPS-T12-18. Please refer to LR-H-146, pages I-2 and I-3, where you describe your method for determining accrued cost by cost pool.

a. Is there any reason to believe that clerks and mailhandlers who primarily worked in operations falling into one specific cost pool (as you defined it in your costing methodology) would have been paid more (or less) than clerks and mailhandlers who work primarily in any other cost pool in FY 1996? If so, please explain fully and quantify the percentage difference in salary between employees working in different cost pools.
b. If all clerks and mailhandlers were paid exactly the same salary, would the expected value of the IOCS tally cost for each cost pool be exactly equal to the accrued cost pool from the pay data system? If not, please explain fully.
c. Please provide the estimated coefficient of variation and upper and lower 95 percent confidence limits around the IOCS tally costs for each cost pool. Please also provide the formulae used to calculate each statistic, and describe any assumptions necessary in order to apply them.
d. Assume that IOCS tally costs and accrued cost pool costs from the pay data system are exactly the same for every cost pool.
   (1) Please confirm that, under this scenario, the volume-variable cost for a tally in a cost pool would be equal to witness Bradley's volume-variability percentage for the cost pool multiplied by the IOCS tally cost for the tally. If not confirmed, please explain fully.
   (2) Please confirm that, in your mail processing costing methodology, the volume-variable cost for a tally in a cost pool is not equal to witness Bradley's volume-variability percentage for the cost pool multiplied by the IOCS tally cost for the tally. If not confirmed, please explain fully.

DMA/USPS-T12-18. RESPONSE:

a. Yes. See my response to DMA/USPS-T12-13.

b. I believe that you mean to say "wage" (i.e., hourly rate of pay) instead of salary. If all clerks and mailhandlers earned the same wage, and assuming that other factors discussed in my response to DMA/USPS-T12-13 can be characterized as random "noise," the expected value of the IOCS costs should be the same as the MODS-based cost pool costs.

c. The requested data were provided with spreadsheet DMA-13b.xls, LR-H-304. The methodology and formulas are the same as that described by witness Steele in Docket No. R94-1, at Tr. 1/56-58.

d. (1) Confirmed. See Tr. 12/6527-8 for a precise definition of "volume variable costs" of a tally.

(2) Confirmed. Note, however, that your hypothetical is extremely artificial. Since IOCS is a sampling system, for the IOCS costs and MODS-based cost pool costs to be equal for every cost pool, it would have to be the case that the sampling error variances for the IOCS cost estimates were zero (they are not) and that wage rates were the same for every clerk and mailhandler (they are not). As indicated in my response to DMA/USPS-T12-13, the difference between the IOCS tally costs for certain cost pools and the MODS-based cost pool costs reflect, in part, limitations of the IOCS tally cost weighting system. In general, the only realistic way to bring the IOCS tally and cost pool costs in line would be (for instance) to perform the tally cost weighting by LDC, CAG, and craft instead of by CAG and craft as is currently the case.

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DMA/USPS-T12-19. Please refer to LR-H-146, Part II, which describes your methodology for distributing mail processing costs to subclass.

a. Please disaggregate volume-variable identical item costs by subclass.
b. Please disaggregate volume-variable top-pieced item costs by subclass.
c. Please disaggregate volume-variable counted item costs by subclass.

DMA/USPS-T12-19. RESPONSE:

a.-c. The requested data may be found in spreadsheet DMA-19.xls, which will be filed in LR-H-305.

DMA/USPS-T12-20. Please refer to LR-H-146, Part II, which describes your methodology for distributing mail processing costs to subclass. Please confirm that Attachment 1 properly reflects your methodology for distributing mail processing costs to subclass/special service. If not confirmed, please correct.

DMA/USPS-T12-20. RESPONSE:

Not confirmed. There are a few mischaracterizations of my distribution methodology in Attachment 1.

1. Description of Mixed—Class Specific. Neither subclass nor shape is recorded for such tallies. Note that tallies with class-specific mixed-mail codes are treated as direct tallies for the purposes of distributing uncounted/empty items and unidentified/empty containers. The costs associated with these activity codes are distributed to subclass in proportion to all other mail processing costs for the same class. See also the response to DMA/USPS-T12-22.
2. Description of Mixed—Uncounted/Empty Items. Note that employees may be handling empty items as well as items not identified as containing identical mail.
3. Description of Mixed—Identified Containers. Under part (2) of the distribution method, note that loose mail in containers is distributed in proportion to piece handlings of the same shape and cost pool. See also Tr. 12/6173.
4. Description of Mixed—Unidentified/Empty Containers. There is no distribution of costs to item type/loose shape. These are distributed to subclass based on

the subclass distribution of identical plus identified containers of the same item type and cost pool. See also Tr. 12/6173.

There may be additional minor differences in characterization between Attachment 1 and Part II of LR-H-146 which I consider inconsequential.

Attachment 1. Proposed Method for Distributing Mail Processing Costs to Subclass/Special Service

Tally Type	Distribution Method*
Direct - Tallies where IOCS data collector recorded subclass/special service and shape of mail being handled. **Piece Handlings** - Tallies where data collector observed employee handling single piece of mail. **Counted Items** - Tallies where data collector counted all subclasses and shapes of mail in item (e.g., bundle, tray, con-con, pallet, or sack). **Top-Piece Rule Items** - Tallies where employee was handling nonidentical mail that is loose, in a bundle, or in a tray, and data collector applied top-piece rule. **Identical Items and Containers** - Tallies where employee was handling an item or container (e.g., wiretainer) containing identical mail in terms of subclass and shape.	Distributed to subclass/special service based upon subclass information recorded by IOCS data collector.
Mixed - Class Specific Tallies where employee was observed handling specific class of mail but where the subclass distribution was not recorded.	Distributed to subclass/special service in proportion to direct tallies of same class.
Mixed - Uncounted/Empty Items Tallies where employee was observed handling item containing nonidentical mail, but for which data collector did not record any information regarding the subclasses of mail in the item.	Distributed to subclass/special service in proportion to direct items of same item type (16 item types).
Mixed - Identified Containers Tallies where data collector observed employee handling a container of nonidentical mail, and for which data collector identified the contents (e.g., items and loose shapes) of the container.	(1) Distributed to item type/loose shape based upon identified container contents (21 item types/loose shapes). (2) Distributed to subclass/special service in proportion to direct items of same item type.
Mixed - Unidentified/Empty Containers Tallies where data collector observed employee handling a container of nonidentical mail or an empty container and for which data collector did not identify container contents.	(1) Distributed to item type/loose shape based upon identified container contents for identical/identified containers of same container type (10 container types). (2) Distributed to subclass/special service in proportion to direct items of same item type.
Not Handling Tallies where employee was not handling pieces of mail, items, or containers.	Distributed to subclass/special service in proportion to distribution of all other mail processing costs.

*With a few exceptions, distributions are within cost pool unless there are no direct tallies within the cost pool to be used as distribution key. The other exceptions are listed below:

1. For MODS Platform, all MODS Allied labor cost pools are used to distribute mixed items in containers to subclass special service.
2. For MODS 1MISC and 1Support, all function 1 cost pools are used to distribute not handling mail costs to subclass/special service.
3. For MODS 1EEQPT (Empty Equipment), all MODS mail processing cost pools are used to distribute not-handling mail costs to subclass/special service.
4. For MODS LDC48OTH, all MODS function 4 cost pools are used to distribute not-handling mail costs to subclass special service.
5. For BMC Platform, all BMC cost pools are used to distribute mixed item costs to subclass/special service.
6. For Non-MODS cost pools, activity codes 6XXX (except 6521-23) are distributed by IOCS operation code.
7. For several cost pools, not handling mail costs are assigned to subclasses of mail but not types of special services

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DMA/USPS-T12-21. Please refer to LR-H-146, Part II, which describes your methodology for distributing mail processing costs to subclass. Please provide, in electronic spreadsheet format, counts and tally costs of direct item tallies by item type (identifying whether they are identical, top-pieced, or counted), separately for MODS offices, BMCs and non-MODS offices.

DMA/USPS-T12-21. RESPONSE:

For distributing direct item tallies, the requested data have been provided in response to DMA/USPS-T12-15.

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DMA/USPS-T12-22. Please refer to LR-H-146, page II-3:

a. Describe what happens when an IOCS data collector counts an item, indicating how additional tallies (if any) are generated as a result, and how counted item tally costs are distributed to subclasses;
b. Provide, in electronic spreadsheet format, by item type, how many items were counted by IOCS data collectors in FY 1996; and
c. Explain how counted item tallies with mixed mail codes (i.e., activity codes 53xx-54xx) occur and how they are handled in your method of distributing mail processing costs. In doing so, please refer to the relevant portions of the SAS code provided with LR-H-218, if necessary.

DMA/USPS-T12-22. RESPONSE:

a., c. See Tr. 12/6302, Tr. 12/6304-5, Tr. 12/6335, Tr. 12/6174. See also programs MOD4DIST (lines 373-425), NONMOD4 (lines 300-355), and BMC4 (lines 248-298), all in LR-H-146 and LR-H-218. Note that these line numbers correspond to the right-hand column of line numbers in the LR-H-218 program listings.

b. Data with which this calculation can be performed were provided with LR-H-230.

DMA/USPS-T12-23. Please refer to LR-H-146, Part II, page 3, where you discuss your methodology for distributing item costs. Please provide definitions for each possible value of the variable F9253B (as described in LR-H-23).

DMA/USPS-T12-23. RESPONSE:

For tallies taken prior to July 1, 1996, see LR-H-49, page 133 ("Categories of Mail—Mixed Pieces"). For tallies taken after June 30, 1996, see the procedure DISP_24, in program q24.prg, LR-H-53.

DMA/USPS-T12-24. Please refer to LR-H-146, pages II-11 to II-12 (titled "Programming Processing Tasks").

a. Define "Function 1 mail processing cost pools."
b. Define "Function 4 mail processing cost pools."
c. Indicate whether your statement, "across Function 1 mail processing cost pools," is equivalent to "across all MODS 1 & 2 Function 1 mail processing cost pools." If not, please explain fully.
d. Indicate whether your statement, "across Function 4 mail processing cost pools," is equivalent to "across all MODS 1 & 2 Function 4 mail processing cost pools." If not, please explain fully

DMA/USPS-T12-24. RESPONSE:

a.-b. See the source code to program MOD4DIST, lines 141-147, in LR-H-146.

c.-d. Confirmed. Please observe that pages II-11 to II-12 of LR-H-146 refer to program MOD4DIST, which relates specifically to the MODS 1&2 facility group.

Response of United States Postal Service Witness Degen
to Interrogatories of the Direct Marketing Association, Inc.

DMA/USPS-T12-25. Please refer to your supplemental testimony (USPS-ST-47), Exhibit USPS-47A, page 7, concerning data collection procedures.

a. Please confirm that some IOCS readings are taken by phone. If not confirmed, please explain fully.
b. Please provide the percentage of IOCS readings that are taken by phone.
c. Has the Postal Service performed any statistical analysis to test whether the subclass distribution of readings taken by phone is statistically different from the subclass distribution of readings taken in person? If so, please summarize and provide a copy of findings.
d. Has the Postal Service performed any statistical analysis to test whether any other characteristics of readings taken by phone are statistically different from those for readings taken in person? If so, please summarize and provide a copy of findings.
e. Is there a field on the IOCS tally data set which indicates whether the tally was taken by phone? If so, please identify the field.
f. Please describe the skills and training of the personnel actually observing the sampled employee when the data collector is taking the IOCS readings by phone.
g. Please describe the process by which the person actually observing the sampled employee records the tally information (including identification of the subclass and shape of mail) when the data collector is taking the IOCS readings by phone.

DMA/USPS-T12-25 Response.

a. Confirmed.

b. In FY 1996, 48.6% of IOCS readings (unweighted tallies) were taken by telephone.

c. My understanding is that some analyses of phone tally characteristics were initiated in the past. Efforts to locate material related to those analyses were not successful.

d. See my response to part c.

e. Yes. Field F32 indicates the sample method. Please see the hardcopy documentation to LR-H-23 for the values this field can take. Note that the guidelines for telephone readings (see LR-H-49 at page 23) indicate that the sample method is not generally chosen at random. Therefore, if one were to attempt to compare characteristics between sets of tallies with different sample methods, the effects of potentially confounding factors must be taken into account.

f. The skills and training of the personnel observing the sampled employee may vary. Data collectors are instructed to verify that the respondent is familiar with IOCS and has supporting items at hand (the Handbook F-45, the automation compatability template, and a scale). See LR-H-49 at page 24.

g. The general procedure is to relay IOCS questions over the telephone, following the flow of the CODES IOCS software. See LR-H-49, pages 23-25, for instructions on administering IOCS readings by telephone.

Response of United States Postal Service Witness Degen
to Interrogatories of the Direct Marketing Association, Inc.

DMA/USPS-T12-26. Please refer to your supplemental testimony (USPS-ST-47), Exhibit USPS-47A, page 6, table 5.

a. Please confirm that 360,212 of 825,664 IOCS unweighted tallies were assigned the code BF4.
b. Please list all possible reasons why a tally could be assigned the code BF4.
c. Please disaggregate BF4 unweighted tally counts by craft and reason listed in subpart b. If you are unable to disaggregate BF4 tallies according to all reasons listed in subpart b, please disaggregate to the extent possible.

DMA/USPS-T12-26 Response.

a. Confirmed.

b. The reasons for assigning basic function 4 (i.e., BF4) to a tally are summarized in the title of Table 5. That is, the basic function 4 code accounts for readings attempted on employees who are on paid leave, nonscheduled, at lunch, CAG K clerks acting as postmasters, etc., at the reading time. For a complete set of criteria which lead to assignment of basic function 4, please see the source code to program ALB040C9, LR-H-21; the variable of interest is 4-FOSDIC-BASIC-FUNCTION.

c. Please see Attachment 1 to this response. Most of these tallies are the result of the employee not working in the facility at the time of the reading (please see LR-H-49, page 28). For such tallies, the employee's status is recorded in field F35, the values of which I used to disaggregate the basic function 4 tally counts. Please see the hardcopy documentation to LR-H-23 for a description of this field.

Attachment 1, Response to DMA/USPS-T12-28
"Basic Function 4" Tallies by Field F35 Values and Craft

Craft	Field F35 Values								
	A	B	C	D	E	F	G	H	I
Supervisor /1	3,242	1,183	1,197	15	40	44	55	1,275	9,282
Clerk /2	23,775	12,702	1,000	92	1,117	312	337	8,294	82,167
Mailhandler /3	5,777	3,282	112	24	391	114	76	1,948	21,559
Carrier /4	17,822	8,667	598	96	401	494	290	7,874	50,858
Sp. Delv. Msgr. /5	176	78	2	0	4	2	3	44	498
Other	2	0	1	0	0	0	0	2	12
Grand Total	50,794	25,912	2,910	227	1,953	966	761	19,437	164,374

Craft	Field F35 Values							Grand Total
	J	K	L	M	N	Z	Blank	
Supervisor /1	1,768	136	263	411	5	1,449	2,740	23,105
Clerk /2	19,537	10,467	737	10,084	385	10,386	280	181,672
Mailhandler /3	4,778	3,178	183	2,986	2	3,356	11	47,777
Carrier /4	4,144	3,380	508	4,928	52	5,851	82	106,043
Sp. Delv. Msgr. /5	45	37	2	58	0	88	0	1,017
Other	3	1	0	0	0	0	577	598
Grand Total	30,275	17,199	1,693	18,467	444	21,110	3,690	360,212

Notes
1/ Roster designations (field F257) 9, 19
2/ Roster designations 11, 31, 41, 61, 81
3/ Roster designations 12, 32, 42, 62, 82
4/ Roster designations 13, 33, 43, 63, 83
5/ Roster designations 14, 34, 44, 64, 84

CHAIRMAN GLEIMAN: Does any participant have additional written cross examination for the witness?

[No response.]

CHAIRMAN GLEIMAN: There doesn't appear to be any. That brings us to oral cross.

Three parties have indicated that they wanted to cross examine the witness: The Alliance of Nonprofit Mailers; the Parcel Shippers Association; and Time Warner, Inc., which I now understand does not have any oral cross examination for the witness.

Does any other party wish to cross examine?

[No response.]

CHAIRMAN GLEIMAN: If there is no one else, then by agreement, Mr. May, on behalf of the Parcel Shippers, is going to go first.

Mr. May, whenever you are ready.

MR. MAY: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. MAY:

Q Mr. ~~Degan~~ Degen, I just have a narrow inquiry about the various data contained in your Library Reference 146, and what it relates to is the mail processing cost data by shape that your predecessor witness here, Mr. Crum, used in his library study.

He got his mail processing costs by shape from Mr.

Smith's Library Reference 106. Mr. Smith said that he got that data from you, from your study, and so that's -- we're just focusing on that. And as I understand from one of your answers to the Presiding Officer's Information Request No. 5, you were good enough to try to tell us simply what the IOCS and MODS-based cost system is, and your answer to Question 20 was the simple explanation, which is what we all want.

The simple explanation is that the IOCS-based CRA space categories are based on the sampled employees' observed activity, while the MODS-based cost pool assignment is based on the employees' clocked-in MODS operation number. Correct?

Now I'm sure it's probably a little more complicated than that, but you said that it was a simple explanation, and so everything I'm going to ask you I'm going to try to keep it that simple so that if a lawyer can understand it, perhaps a large number of uneducated people will also be able to understand it.

That I take it means is that in IOCS the collector apprehends the postal employee and says what are you working on. And he tells him what he's working on, what kind of activity it is, and what the piece is. Whereas in MODS the employee has clocked in to a particular operation, so the assumption is that that's the operation he's performing on

that particular piece of mail when it's sampled. Is that basically correct?

A Well, in both instances when the employee is apprehended the information comes for the employee. You're asked what operation you're clocked into --

Q Yes.

A And the data collector also observes what's being done, and those are each recorded as separate responses.

Q Yes.

A In the ~~code~~ CODES system.

Q Okay. And that all ended up resulting in your various tables. The ones that I'm looking at I believe -- that are of concern to us are in your Library Reference 146 and III, pages 10 through 15, and on those pages you have the costs by shape for parcels in each subclass of mail, and within the subclass different kinds of mail.

For example you have Third Class, Third Nonprofit, Carrier Route, Third Nonprofit Other, right through the various categories up through Standard B. And the sum total of your first group is given on page 12, and then the subtotal -- the total of the costs for the remaining categories is given on page 15. And it's those total costs as I understand it that are then reflected and were picked up by Mr. Smith and then Mr. Crum. Is that correct?

A I believe Library Reference 106 uses the entire

column --

Q Yes?

A Not just the total.

Q Well, that's right, it uses the whole thing, but the bottom line is what we're interested in. And then am I correct that having established what these gross costs are by shape you then simply divided that number by a volume number to get a cost per piece? Is that correct? Or someone did.

A I don't know. I provided the cost information that's in 106, but beyond that --

Q Right. So you don't know how they got from those gross numbers to the cost per piece, but presumably that's what one would do if you divide the volume into the total cost for all mail of that particular shape to get the cost per piece. Or is that --

A Is that a question?

Q Yeah, isn't that what normally one would do?

A To get unit costs --

Q Yeah.

A You would ~~provide~~ divide total cost by volume.

Q Yeah.

A Yes.

Q And this is the total cost number. Yours is the total cost number, that somebody else would then divide

volumes by to get the unit costs. Is that correct?

A Well, yeah. I mean, I'm saying yes to the fact that you divide total cost by volume.

Q Yeah, you didn't do it, but somebody else --

A I didn't do it.

Q Would have done it, yeah.

A Right.

Q Now the question has come up as to the reliability of the reporting by the collectors, and I believe that you have testified at one point that there are several hundred in effect supervisors or program coordinators of this data collection effort and several thousand actual collectors. Do you recall that testimony?

A Yes, I do.

Q And that's a lot of people to have to worry about whether they're each one doing it correcctly, isn't it?

A Yes, it is.

Q Now you yourself did not do any of this supervision, did you?

A If you mean am I responsible for supervising any of these people, no. Have I seen these kinds of tests, yes.

Q You mean in -- just to go see how it's done, as though one of us might curiously want to see well, how do they actually do this. Is that what you mean, or you've made a career out of watching them do this?

A Somewhere in between those two.

Q Enough to satisfy yourself that all 3,000 odd collectors are doing it accurately and are able to tell when asked what a parcel is and what a flat is?

A Well, if you are asking me, am I satisfied that the data are reasonable for the uses to which we put them, I am. If you are saying would I verify that by going out and watching each individual test, my answer would be no.

Our work with the data over many years has indicated fairly stable results. So that if people were just coding things randomly out there in large numbers, I would not expect the data to behave nearly as well as they do. But I am satisfied that they are reliable for the uses to which we put them.

Q Now, the -- just focusing again on the need for these data collectors to be able to tell the difference between a flat and a parcel, the testimony has been put into the record as to which reference documents these collectors or Postal personnel would use. And, among others, and I think you have even reverted to them as the Handbook 45 as one source of where they tell the collectors, this is how you do this. And the fact is Handbook 45 is in the record of this proceeding.

Are you familiar with that handbook?

A Yes, I am.

Q It is rather complicated, isn't it?

A I believe the correct reference would be F-45. The Postal Service has a number of handbooks and they have both letter and numerical --

Q F stands for field, I guess, isn't it?

A I believe it stands for finance. But I'm not sure. It's F-45, however.

Q But you've seen it and the very, very detailed definitions of what parcels, different kinds of parcels there are and what other particular kinds of mail are; is that correct?

A I believe it reflects the great pains to which the Postal Service has gone to ensure uniform data collection.

Q Now, there is also a document called the -- the DMM section, C050 that has been again cited by other witnesses as a basis for defining the difference between a parcel and a flat. A document presumably available to mailers as well as postal personnel; are you familiar with that document?

A Yes, I am. In fact, I believe it is cited in the F-45 handbook as regards the shape issues.

Q And that is -- is that kind of the bible along with 45 for these data collectors that would guide them to know whether this is a flat or a parcel that they are handling?

A Those are the rules. I don't know what you mean by "bible" but those are the rules they are expected to follow in their data collection procedures.

Q But you aren't the one who has given the instructions to these collectors, are you?

A No, I am not personally giving them instructions.

Q And you didn't have anything to do with the promulgation of the handbook, 45, F-45, or the DMM provision we've cited, did you?

A No.

Q Now, there is one other possible source of information about mailbox shapes, is there not? For example, in Third Class, it would be Form 3602R. Are you familiar with that?

A You're talking about the mailing statement?

Q Yes.

A Yes.

Q Because on that mailing statement, this is something where the mailer, not the data collector, but the mailer is now telling the Post Office, this is what I think I've got. I've got a letter, I've got a flat, I've got a parcel, what have you, and he at this point the mailer is saying in the front of it he has to begin by saying what processing category it is and he says it's either a letter, a flat, automation category, machineable parcel, irregular

parcel, he checks one of those boxes, does he not? Are you familiar with this?

This is the form. Do you know of the form?

A Yes. I'm not an expert on acceptance procedure but I am aware of those fields on that particular form.

Q And then there is another part C of it which is where you check whether you've got a -- for various types of the DBMC or CSCF or DDU, you check again a box, the mailer does, whether they've got a saturation letter, a high-density letter, or a nonletter. Here they are only reporting whether it's a letter or a nonletter.

Are you familiar with that?

A I am. I'm not comfortable with your characterization that a mailer just checks these. I mean, it is subject to review by Postal personnel so I think both the acceptance personnel and the mailer have to agree that the form is filled out correctly.

Q I didn't mean to imply that somebody wasn't checking it but this is another instance of where somebody else is reporting information about a mail shape, is that not correct? Somebody else is either verifying or correcting?

A And which one of those was shape?

Q Well, I mean --

A It isn't the drop ship and processing category.

It may be determined by shape.

Q Well, but indeed this at least tells you this is another box that would tell you whether it is a letter or a nonletter. But elsewhere on this form, as we have agreed, there is another box that is more specific that talks about whether it is a flat or a machinable parcel.

So this then would be another fundamental source of data information for the Postal Service, would it not, so far as this class, subclass of mail?

A With respect to volumes or costs? I mean, you're saying in other words, but so far we've only talked about costs.

Q With respect to volumes. With respect to volumes.

A I wasn't done.

Q Okay.

We're simply trying to establish where the various data inputs have come from that have led us to Mr. Crum's testimony as to what a parcel costs and what a flat costs.

A But I am not here to testify with respect to volume.

Q No, but you are here on costs. Exactly.

A Exactly.

Q So we are just trying to determine how many other sources of information may there be. But you are or at least this collection, cost collection system, is the source

for the costs by shape. And somebody else has to apply different data.

Now, do you have any idea of how the data that is gathered from this form, for example, 3602, is put together with the data you have provided? Do you have any idea how that happens?

A I certainly have some idea but I am not familiar with it at a level that I feel comfortable testifying to it.

Q But you're -- you simply have the cost input. So let me ask you this again about the accuracy of the data that these collectors have collected. These are again collectors that do not report to you and are not supervised by you, correct?

A Is the question do they report to me or are supervised by me?

Q Yes.

A No.

Q And did you tell them what data to collect?

A I think, over the years, we've had some influence on what is collected by IOCS, but I am not in charge of that, and I've certainly not listed everything that needs to be collected.

Q Now, I was reading your testimony in the record when you previously appeared, beginning at pages 6642, where you were asked a series of questions about, well, what would

a data collector put down?

For example, this question is, now when IOCS clerks distinguish between letters and non-letters, do they consider only the outside dimensions of the piece or do they also consider the weight of the piece? You said I'm not certain.

So, there are about five pages of questions like that where you did not seem to know what the data collector would put down under these kind of complicated situations. For example, if he's got a whole container, what does he put down as the number of pieces?

You didn't seem to have any knowledge about that, so I'm just wondering whether that was simply a momentary lapse of memory on your part or whether it is the case that you really don't know how these data collectors record data or what they're supposed to do. Which would it be?

A It was a reluctance on my part to offer an answer that involved some level of speculation. There are a lot of data here, and I work on a lot of different aspects of it. I was reluctant to offer an answer that I was not positive about, and I believe we followed up with written answers to all those things.

So, I'm familiar with what's being used and, given any particular question, can fairly quickly identify the exact procedures used, but I don't have them all at my

fingertips.

Q Well, what I'm really getting at is your ability to vouch for the reliability of what these data collectors are doing and what they're reporting. That's really what I'm asking about.

I put it to you -- you can agree or disagree -- that if you do not have that kind of knowledge about it, I wonder how sure you can be of the reliability of this data, particularly such things as their accuracy when they say something is a parcel or that something is a flat.

Do you think that you have enough involvement on a day-to-day basis with those data collectors to have a high confidence level in the work that they have reported?

A I am very comfortable offering that opinion, knowing what I know about the level of resources, training, supervision, and manpower that go into the data collection, the efforts that are taken to ensure good data collection, but as I said just a little bit earlier, the real test is whether or not the data are stable and behave themselves over time.

I mean you can only -- as long as you have human data collectors, there is the possibility that errors will occur, and no one can guarantee that that wouldn't happen.

Q Several of your fellow witnesses have been asked a number of questions about their ability to differentiate

between a flat and a parcel. I don't know whether you're familiar with any of that testimony or not. Mr. Crum just went through that once again right before you.

But if you will accept that the record does show that there are a number of parcels and flats that are indistinguishable to the human eye and that the record discloses that a number of Postal Service witnesses have been very hard pressed to identify which is which without the aid of tape measures and that sort of thing, does that surprise you that that would be that difficult?

A No, because I don't believe any of the people of whom this were asked were trained as data collectors, and so, in some cases, there may have been that they didn't have that fact at their fingertips, but you have to realize these people are not the people collecting the data.

I mean you seem to be implying that the people who are out there collecting the data don't know how to distinguish flats from letters, and I haven't seen any evidence of that.

There has been some inability to instantly recall what the particular rules are, but I don't see how that in any way calls into question the data collection procedures.

Q Well, I mean it isn't a question of whether it's called into question. It's a question of whether or not you're in a position that you have sufficient knowledge of

how they operate and have had sufficient opportunity to observe them to be able to personally tell us, tell the record, that, yes, I have examined their results, I have double-checked what they have done, and I am satisfied they're doing it correctly. You're not in that position, are you?

A Yes, I am. As a statistician and an economist, the data we work with, we check for reasonableness and consistency, and those are far more powerful checks than picking any particular number of tests to go visit.

On top of that, I cannot personally vouch for supervising every one of these data collectors, but that would be an impossible task, no single person can, and I'm very familiar with the hierarchy of data collection technicians, supervisors, the number of training sessions they hold each year, and the number of resources that go into data collection such that I am very comfortable offering them this opinion.

Q Tell me, what are the statistical tests you ran to give yourself a comfort level that these collectors were reliably reporting what were third-class Standard A parcels and what were Standard A flats?

A Just the consistency of the numbers over time. I don't recall the particular separations at this point.

Q How long have you been measuring costs by shape?

A Costs by shape have been part of the LIOCATT system as long as I've been working with it.

Q Between third-class flats and parcels?

A If you look at the listing of activity codes, which is essentially the finest level of disaggregation in LIOCATT, shape has been a dimension of that as far back as I can remember, and I've worked with LIOCATT for 15 years.

Q Are you saying that not only were you able to desegregate this data, if I go back 15 years I can find out 15 years ago not only the difference between third-class letters and non-letters but that I can find out the different class for what is now called Standard A flats and Standard A parcels? Is that your testimony?

A I'm not sure the data exist for the last 15 years and I'm not sure the level of shape disaggregation and when it changed. I mean, currently, there is a separation of letters, flats, IPPs, and parcels for Standard A. I can't tell you off the top of my head when that went into effect.

Q I know, but you were telling us the reason you statistically are comfortable with this is because it's been consistent for so many years. I put it to you that it hasn't been done that many years, has it?

A It's been done a number of years.

Q How many?

A At least four, I believe.

Q Is that enough? How many years has the MODS system been done to measure the cost differences between flats and parcels in Standard A?

A I don't understand the question. What do you mean by measuring --

Q I mean this -- is this not only one time that you have employed MODS as a way of determining the costs for these -- for, let's say, Standard A flats and Standard A parcels? You haven't done that before this last time, have you?

A No, we have not, but the data we're using have existed for quite some time.

In fact, if you look at Dr. Bradley's testimony, he's using MODS information by cost pool, TPH, and hours back through 1988, and I don't think that was the earliest -- I mean it may be the earliest he had access to, but there were data prior to that.

Q And you actually went and checked this to give yourself a comfort level going back all these years to see that there is a consistency in the kind of cost differential that is reported between flats and parcels and Standard A, you did that work? Or is that something you could do?

A Wait, are we talking about IOCS or are we talking about MODS, now?

Q Both.

A Well, MODS isn't by itself sufficient to do that kind of analysis. But our work with the MODS data over time has revealed very consistent reporting. You know, there have been problems but in general it is a very reliable data set.

IOCS, we've probably been working with costs by shape for at least four years and if the data were subject to the level of human error and erratic reporting that you seem to imply, we just wouldn't -- the data wouldn't behave themselves.

Q Let me switch focus here. You answered one of the Time-Warner interrogatories, I believe it was number 42, by saying that you were not aware of any reasons why there would be different productivities for shapes between subclasses. Do you recall that?

A Yes.

Q And I take that, that in effect you're saying at least you are not aware that there are any studies or any data that shows, I take it, that a First Class parcel would have a different productivity for a particular mail processing function than a Third Class parcel? Is that what that answer means?

A With respect to the operation groupings that we're using, yes. And I was saying in particular not that there wasn't any but that I was not aware of any.

Q And therefore does that mean that one should suppose from that that would mean that it's possible, since the productivities are saying that the costs for that particular mail processing step would be the same, irrespective of which subclass it's in, if it's the same shape?

A Not necessarily, because different subclasses might have different levels of preparation and require different numbers of handlings. My comments were with respect to the sortation of a particular piece. But some pieces may require sortation two or three times to get down to the delivery unit.

Q Well, but the particular function, mail processing function that is being performed on it, one piece would have avoided some of those and the next piece wouldn't. But that particular function, which is what gets measured, would be the same?

A No, that's not true. The -- if you look at the operation groupings, for example, manual letters is one category. A collection piece that was going out of town might have to go through three manual letter sortations. A five-digit presort letter that's drop shipped to the delivery unit wouldn't go through any or if it were DPSed, it would go through one. So even within those operation groupings, there is variation in the number of handlings

that occur.

Q But within the particular shape, it would not be the shape that caused any difference in productivity; is that correct?

A I'm confused.

Q If there were a difference in a letter between First and Third Class letters, as I understand your testimony, is if there are any differences in the productivities of a First and a Third Class letter, it does not have to do with its shape. And similarly, if there are differences between a First Class parcel and a Third Class parcel, again, if there are differences in manual processing steps, that does not have to do with the fact of its shape?

A You're taking some liberties with my answer there. I said that I was not aware --

Q Well, that's what I mean. You're not aware of anything --

A I'm not aware of any reasons for systematic differences or any studies that support those.

Q Let me ask you, if these data collectors again who may be having difficulty between letters -- between a flat and a parcel, perhaps is it possible they are also having trouble distinguishing between a Standard A and a Standard B parcel? Is that possible?

A I haven't agreed to the fact that they are having

difficulty, so I am uncomfortable with you attaching that to the question.

Q Well, if it's the case, if it's the case, as other witnesses have testified to, that there are these problems between differentiating between flats and parcels in certain areas, is it also the case that a -- one of your collectors could be confused about whether something is a Standard A or Standard B parcel; i.e., one weighs 15 ounces and another weighs 1 pound, 1 ounce, does he know which is which?

A Well, let's take it in two parts. I'm still not conceding to the fact that there's been testimony that data collectors are confused.

Q I said that there are certain parcels and flats in certain dimensions --

A And I'm not agreeing to that.

Q You believe that these trained collectors, without measuring these materials, could, just by looking at them, tell you whether this is a flat or a parcel?

A If all they do is look at them, they're not doing what they're supposed to do.

Q What are they supposed to do?

A They're supposed to measure them.

Q They measure.

Now, do they weigh it?

A Yes, they do.

Q Each piece gets weighed?

A Each piece that's a top piece rule or is reported as a single piece, yes.

Q But they're not weighing or measuring everything in the bin. They're following some other shortcut rules. Is that correct?

A Well, they're not shortcuts. They're sampling from the bin and weighing the selected piece, or if they count the proportions of volume in the piece, they're not weighing those proportions.

Q Are you aware that many parcel shippers ship -- commingle third- and fourth-class parcels? Are you aware whether that is the case or not?

A I believe I've seen that. I'm not sure that I'm -- I don't know to what extent it happens.

Q Well, if it happens, I mean isn't it quite possible that, in a bin which has top pieces that are third-class parcels, because they've been picked out and weighed, that it's also got a lot of fourth-class parcels in it or Standard B parcels?

A Yes, that's possible.

Q So, it is, indeed, possible that a number of costs, Standard B parcel costs, would be counted as Standard A parcel costs?

A No.

Q Why not?

A Because the sample is based on more than one container.

If the container you posit does contain a large proportion of Standard B parcels, then, over the course of a year and the repeated sampling of those kinds of containers, we would expect that the Standard B pieces would be chosen in proportion to their presence in the container.

Q That's what you would expect. I mean suppose there were a lot of bins like that, though, and a lot of containers like that.

A All the better.

Q Why is that better?

A Because we will sample them more often, and the laws of probability in sampling tell us that we will then, in the final result, estimate -- which is what we're setting out to do -- estimate the proportion of that container that contains Standard B versus Standard A.

Q And you do that by, again, a selected sample. Is that correct?

Every once in a while or at least upon some planned basis, since you're doing this scientifically, on some planned basis, you empty the whole container and count what's in it, weigh it and count it and measure it. Is that right?

A We only weigh it when we pick a single piece, but on some planned basis, we do count it.

Q But if you don't, on a planned basis, weigh every piece in it, how are you going to correct for the fact that you've got mixed third- and fourth-class parcels?

A Let's do an example here. Let's say there are 100 pieces in this container and let's say that 30 of them are Standard A and 70 are Standard B. If we pick at random each time from those 100 containers, we will end up weighing 30 Standard A parcels and 70 Standard B parcels.

Q If you weigh every one of them.

A No. When we weigh the one we pick. We've got 100 different containers, we pick at random from each of those, and 30 percent of the time we will pick a Standard A and 70 percent of the time we will pick a Standard B and it will be weighed.

Q Because the law of random probability means that the top piece is going to obey that law and is going to be the piece selected on that -- over time will be the piece selected. Is that what you're saying?

A Yes.

Q Let me cite to you an answer that another Postal Service witness, Mr. Moeller, gave about whether or not the residual piece surcharge was going to be applied to flats that were prepared as parcels.

I ask you to accept that, indeed, the record discloses that the Postal Service allows flats to be prepared as -- machinable flats -- to be prepared as parcels, shipped as parcels, and in fact, his answer said that, under current regulations, a mailer preparing pieces having overlapping dimensions has two options.

Do you understand what overlapping dimensions means there?

A I'm not sure.

Q Well, it means that, for instance -- his example -- it says a piece having dimensions of six inches times 11 inches times a half-an-inch high, he says meets the dimensional criteria of a flat-size piece, as well as the dimensional criteria of a machinable parcel, provided it meets the minimum weight requirements.

In other words, this piece of mail satisfies both definitions under DMCO50 as both a flat and a parcel. So, the mailer has the option of preparing it as a parcel, and other witnesses -- Postal Service witnesses explained why a mailer might want to do that even though it costs them 10 cents in the future.

But he said that -- he's explaining that you have these two options and that's to declare the pieces to be flats or to declare them to be machinable parcels.

Let me ask you this. These are mailed as parcels,

presumably. The mailer likes to do that.

Now they're being sampled by your collectors. The collector has it in his hand. What does he report that piece as?

A Based on the dimensions of the piece, he reports it as a flat or a parcel, ignoring how it was prepared or is being processed. That's an explicit instruction in the F-45.

MR. MAY: Thank you. That's all I have.

CHAIRMAN GLEIMAN: Mr. Thomas.

CROSS-EXAMINATION

BY MR. THOMAS:

Q Mr. Degan, I am Joel Thomas. I'm representing the Alliance of Nonprofit Mailers. The last time you were here I think you were asked some questions by David Levy for the Alliance, but I'll be doing it today.

Actually I wanted to follow up just for a moment on something that Mr. May was asking you about. You were indicating that the data that you're seeing coming out of the IOCS is quite consistent over time.

A Yes.

Q If there were a departure where costs for one item were -- that had been more or less tracking in tandem, some other item suddenly departed, would that be a signal to you that it needed further analysis?

A It wouldn't necessarily signal a problem with data collection. There are a lot of factors that affect costs, such as makeup and processing plans, et cetera, but yes, yes.

Q It would suggest that it needs further analysis. Okay. Actually I also wanted to follow up -- I was going to ask you some questions, and let me perhaps ask counsel, I talked to David last night. I don't think he has seen any answers in the testimony in part that Mr. May referred to.

There was an offer to follow up and provide some further information, and if that's been done I don't think David or I have ever seen it, because he didn't know about it last night, and I haven't seen it. I don't want to make too much of this. I don't think it's too big a problem.

CHAIRMAN GLEIMAN: David for purposes of the record is Mr. Levy?

MR. THOMAS: Yes, Mr. Levy. I'm sorry.

CHAIRMAN GLEIMAN: Mr. Koetting.

MR. KOETTING: I will be happy to furnish Mr. Thomas with a copy of the written responses of the United States Postal Service Witness Degan to oral cross-examination, and this document to the best of my knowledge was filed and served on the parties and is dated October 28, 1997. I can make no representation that I know with personal certainty that Mr. May seems to feel is so

important in this proceeding that actually it was served on the parties, but I have no reason to believe that it was not --

MR. THOMAS: Okay.

MR. KOETTING: And I'll be happy to furnish you with another copy right now if you wish.

MR. THOMAS: Okay. But maybe I could just follow with a few quick questions. I mean, I -- well, maybe I should take a look at this. I didn't know it existed.

CHAIRMAN GLEIMAN: Why don't you take a moment to take a look at it.

[Pause.]

While Mr. Thomas is looking at that, Mr. Koetting, let me just ask that postal counsel and others who participate in the proceedings not characterize the positions of other parties. The editorial comments sometimes can get out of hand -- even from the bench -- so let's try and stick to the facts.

MR. KOETTING: Very well, Mr. Chairman, I apologize if anyone was offended.

MR. THOMAS: Thank you for these answers. They are sort of of the type I somewhat expected.

BY MR. THOMAS:

Q I think that having looked at the questions and your answers last time I realized that, and I think it's

been confirmed now by looking at these answers, there was -- in one case I think you sort of spotted the question that David was after, but I think in some of the others you didn't.

The question that David was putting to you in several of these cases is what happens to a tally if the tally is in effect inconsistent with the tally-taking rules. In other words, you wind up with a piece that is simply too heavy to have been tallied as a letter, but that is what the tally says. Now we're not -- how it got that way was not the question, but what do you do with it after the tally have been taken and reported is really the question I think that we're after.

A Well, I could have answered that. There is a series of edits that takes place on the tally file, and things with inconsistencies like a subclass being inconsistent with a weight definition would be flagged. The details of that I believe are in Library Reference H-18, and accompanying that would be Library Reference H-21 that contains the source code for the recoding rules, if you will, the error corrections.

Q So it's your assumption that that would be picked up in the error correction, the editing process, and would be removed as a tally?

A Boy, I don't know off the top of my head. I

believe it would be corrected, and I can't say -- I can't spout the exact rules that are used for the correction, but there would be a determination as to which of the inconsistencies needs to be eliminated.

Q Some inconsistencies conceivably could be corrected, but I don't see how a wrong weight could later be corrected. Wouldn't they just have to -- I mean, if they can't correct it because there's no basis for it, I thought that they simply disregarded the tally, but --

A They may simply disregard the weight.

Q I see. Okay.

A I mean, yeah, I think some determination is made as to where's the greater likelihood of error and the erroneous field might be eliminated.

Q That would mean that you couldn't divide volumes that were ultimately determined by weights or something because you would not necessarily have the same count in each column to get a valid result. You couldn't get an average then by averaging those two, since some had been tossed out. I mean --

A Unless you weighted back --

Q An average missing --

A Yeah, the average missing amount.

Q Okay. And perhaps I can just finish up on this whole line here by -- in your testimony in what is

handwritten No. 8 at the bottom of your supplemental testimony ST-47 that we're here about today, there is a statement towards the end of the first full paragraph on that page that says final adjustments and corrections are made by headquarters technical staff. Is this the process we're talking about now?

Let me give you a minute to --

A Yeah. Yes, in fact it's exactly there that I wrote the H-18 and H-21 references. Yes.

Q All right. So that's the process that you were -- you meant when that sentence was -- by that sentence, that process you just described. Pursuant to those two library references.

A That's correct.

Q Okay. I would like some sort of -- one thing more I would like to go through for a moment, and I hope it won't prove either lengthy or difficult. In these rate cases, the revenues, pieces and weights are determined by the RPW system and that's where volume figures come from, am I correct?

A I mean that is not my area of expertise, but that is my understanding.

Q But costs, on the other hand, come from the IOCS system, and that those break out costs by class and sub-class?

A That is correct.

Q Okay. The two systems, in effect, --

MR. KOETTING: Excuse me. When you -- can you clarify, when you are talking about costs, what particular costs are you talking about?

MR. THOMAS: Mail processing costs.

MR. KOETTING: That's fine.

THE WITNESS: Yeah. And given that he wants to be very clear, it is IOCS and the LIOCATT processing or the new mail costing.

MR. THOMAS: IOCS, yes.

THE WITNESS: Well, IOCS is the data collection system that collects the tallies, and then costs are obtained after going through some process of distributing mixed mail, et cetera, and it is that entire process --

MR. THOMAS: Right.

THE WITNESS: -- that produces the costs.

MR. THOMAS: Okay.

BY MR. THOMAS:

Q But the two systems, the RPW and the IOCS, are intended to in some ways work -- I am not sure how to put this -- in tandem with each other, so that you can use volume numbers and the cost numbers derived ultimately the IOCS tallies to determine unit costs, is that correct?

A I think that would be a fair characterization. I

can't speak to, you know, the intent of the people who developed them, but that is certainly how they are used.

Q All right. Now, I want you to assume with me for a minute that a qualified, non-profit mailer brings a mailing to a post office with the intention of entering it at the non-profit rates, but than an entry clerk determines the mailing is not eligible for the non-profit rate and asks the mailer to pay the regular rate for that mailing. Assume further that the mailer does not contest the issue, but rather agrees to pay the additional postage, so the postage is sent at the rates applicable to standard A regular rate mail.

Since the mailer has paid the rate applicable to standard A regular rate mail, the revenues received for this mailing, and the associated mail volumes will be tallied and credited to standard A regular rate mail and the RPW system, won't it be? As it should be.

A Hmmm?

MR. KOETTING: Mr. Chairman, I am a little stymied here. Not only is that sort of going beyond the scope of the witness' testimony, it clearly doesn't seem to have anything to do with the supplemental testimony, Library Reference 146, or anything that -- it is just a basic question about the IOCS data collection system that could have been asked any time between July 10th and the date Mr.

Degen took the stand on October 21st.

CHAIRMAN GLEIMAN: Mr. Thomas, would you like to comment before I rule?

MR. THOMAS: Given your prior rulings, I don't think I need to comment. I think we can get to this and get through it quite quickly here. It is related to the IOCS tallies, which this testimony concerns.

CHAIRMAN GLEIMAN: Yes. I am inclined to, as long as Mr. Degen is here and shed some light on this matter, let's just move ahead with it. These have been unusual proceedings. I noticed just the other day, in response to a Presiding Officer's request that, I am going to guess at it and say it was 6 question 1, but I could be wrong about that, that I remember somebody saying, well, golly, gee, yeah, there was a significant error, and, you know, some corrected data was supplied to us.

So, you know, things are kind of fluid here and, you know, the case is rolling along, and let's just get answers to questions when we can.

BY MR. THOMAS:

Q Do you recall that or do you want me to restate that hypothetical?

A Well, let me just say how I feel about these kinds of questions. I'm not really prepared to answer them as testimony. I mean, I worked with the RPW system a lot off

and on over the years but I didn't come here to testify about that and I'm really not tooled up to say for the record what the answers are. So anything you get from me here would have an element of uncertainty or speculation to it and I am just not very comfortable with that.

Q All right. Well, let's go on to the second part of that.

Take the same mailing. If that mail is going through the system and it is in fact being handled by a clerk or mail handler who is tallied for IOCS purposes, won't the IOCS tally indicate that the mail handler was handling non-profit mail? How would the mail handler know that this was paid at the regular rate?

A My understanding is that the IOCS data collector would report the indicia which was present on the envelope.

I'm not aware that you are allowed to pay the non-profit rate without correcting the indicia. But, in answer to your question, the IOCS data collector would report -- would have no knowledge of what rate was paid and would only be able to report the indicia on the face of the envelope.

Q All right.

If the volume were attributed -- for this mailing were attributed to regular rate mail, Standard A regular rate mail because that's the rate that was paid, it is

presumably, on the 3602, it is presumably picked up in that fashion, but some of this mail was tallied for IOCS purposes and was reflected as non-profit mail, the result would be there would be costs attributed to non-profit mail that do not belong with non-profit mail and there would be an overstatement of volume for Standard A regular rate mail that did not reflect volume that in fact it received. Or no, the volume that it received would be reflected but not the costs?

A Yeah, I think it was backwards the first time. But if you're asking if this particular piece is recorded as non-profit but had been mailed at regular rates, then the costs would be reported as non-profit, not in regular, and the regular costs would be understated.

MR. THOMAS: All right, that's all I have.

CHAIRMAN GLEIMAN: Is there any follow-up?

[No response.]

CHAIRMAN GLEIMAN: If there is no follow-up, that brings us to questions from the Bench and I don't believe there are any.

Would you like some time with your witness, Mr. Koetting?

MR. KOETTING: Two minutes, Mr. Chairman?

CHAIRMAN GLEIMAN: Two minutes it is.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Koetting, before you begin, just so I don't leave you all hanging, my recollection was correct and it was Presiding Officer's Information Request Number 6, Question Number 1, which was answered just a little bit ago, you know, where we were told that, and I'll quote, "as a consequence, the originally filed cost avoidances were regrettably significantly" -- sorry, got to flip a page here -- "overstated."

So, you know, here we are at this late stage getting corrections that are by the Postal Service's own words significant, and I think that we just all have to be a little flexible so that we can get the best record that we can get, and so that all the parties can be satisfied that they have had a reasonable opportunity to get information that they feel they need, and with that, I'll stop editorializing and let you proceed with your redirect.

MR. KOETTING: Thank you, Mr. Chairman.

REDIRECT EXAMINATION

BY MR. KOETTING:

Q Mr. Degen, Mr. Thomas in the exchange just completed hypothesized a situation in which there would be a misallocation of costs to nonprofit mail if the mail were endorsed as nonprofit but actually entered as regular rate.

Do you recall that conversation?

A Yes, I do.

Q If we were to hypothesize the opposite situation, in which a piece were endorsed as regular rate but actually entered as nonprofit, would that cause a similar corresponding misallocation of cost away from nonprofit and to regular rate?

A Yes, it would.

MR. KOETTING: That is the only thing I have, Mr. Chairman.

CHAIRMAN GLEIMAN: Is there any recross?

[No response.]

CHAIRMAN GLEIMAN: There doesn't appear to be any.

That being the case, Mr. Degen, I want to thank you. We appreciate your appearance here again today and your contributions to our record, and if there is nothing further, you are excused.

[Witness excused.]

CHAIRMAN GLEIMAN: That concludes today's hearings.

We will resume our hearings on R97-1 on December 10th to receive testimony from Postal Service Witnesses Seckar and Degen -- wearing a different hat that day and we'll be back in the hearing room bright and early tomorrow morning on MC97-5.

I wish you all a pleasant day. Thank you.

[Whereupon, at 1:09 p.m., the hearing was

recessed, to reconvene at 9:30 a.m., Wednesday, December 10, 1997.]