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

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1, ITEMS 1-10 (August 18, 1997)

The United States Postal Service hereby provides its response to Presiding Officer's Information Request No. 1, Items 1-10, issued on August 4, 1997. The questions are stated verbatim and is followed by the answers. In some instances, individual items include multiple questions within general subject areas of more than one witness. In those instances, the questions have been split to allow the most appropriate witnesses to sponsor responses in their general subject areas. The Postal Service is still reviewing materials in order to prepare a response to Item 11, and anticipates that it will be able to provide this response shortly.

The Postal Service also notes that in Item 10.a., the Presiding Officer has requested information regarding the procedures used to forecast international mail volume and revenue. While the Postal Service has provided the information requested, we should restate the Postal Service's consistent position that statements of international volume and revenue are not subject to Commission review. In this regard, we note that in Docket No. R90-1, the Governors of the Postal Service responded as follows to the Commission's claim that it has the authority to make unilateral adjustments to these items:

> We do not acquiesce in the Commission's unassisted intrusion into the Postal Service's statement of test year international revenue and volume. It is our firm position that the Commission may not,

> unilaterally and unaided, change the revenues and volumes for nonjurisdictional services . . .

Decision of the Governors at 30-31 (Third Recommended Decision, Docket No. R90-1, January 6, 1992). Although voluntarily furnishing the information requested, the Postal Service should not be viewed as departing in any way from the Governors' position.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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August 18, 1997

Response of United States Postal Service Witness Alexandrovich
to
Presiding Officer's Information Request No. 1

POIR No. 1:

1. Purchased Transportation

a. Alaska Nonpriority Air Adjustment

(1) Please provide the FY 1996 data for Alaska air and surface transportation as presented for FY 1995 in response to POIR No. 3, questions 15-16, Docket No. MC96-3 (Tr. 8/3058-60, colume 2 of 2).

RESPONSE

See Attachment 1 to this response.

Attachment 1 to Question 1.a.(1)
Presiding Officer's
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Average Cost Per Cubic Foot Mile

1996

53121	$0.00432293
53124	$0.00165858
53127	$0.00050775
53131	$0.00039584

Average Cost Per Cubic Foot

1996

53121	$0.0056073

Intra-Alaska Air Rates

	Mainline			
	Linehaul per ton-mile		Terminal Handling per pound	
	Priority	Nonpriority	Prioirity	Nonpriority
Sept 95 - Jan 96	$1.2098	$0.7324	$0.2617	$0.2249
Jan 96 - July 96	$1.3228	$0.8008	$0.2067	$0.1776
July 96 - Sept 96	$1.3142	$0.7956	$0.1940	$0.1667

	Bush	
	Linehaul per ton-mile Nonpriority	Terminal Handling per pound Nonpriority
Sept 95 - April 96	$6.5091	$0.3260
April 96 - Sept 96	$7.2406	$0.3770

Total Accrued Cost by Account (in thousands)

1996	Dollars	Adjustments	Total
53562 Intra-Alaska mainline-nonpriority line	20,586	0	20,586
53566 Intra-Alaska mainline-nonpriority term.	23,738	0	23,738
53561 Intra-Alaska bush-nonpriority line	19,324	0	19,324
53565 Intra-Alaska bush-nonpriority term.	21,289	0	21,289
53563 Intra-Alaska bush-priority line	2,894	0	2,894
53567 Intra-Alaska bush-priority term.	3,009	0	3,009

Response of United States Postal Service Witness Alexandrovich
to
Presiding Officer's Information Request No. 1

POIR No. 1:

1. b. Variability Factors for Purchased Transportation Cost Accounts

The Base Year 1996 transportation costs and variability factors by account are shown in workpapers to USPS-T-5, Worksheet 14.0.1. The source of the factors is listed as Docket No. R87-1 Appendices to Opinion and Recommended Decision, Appendix J, CS XIV, page 49. The purchased transportation workpapers accompanying the FY 1996 CRA also show the variability factors by account on Worksheet 14.0.1 and reference the same source. Comparing both worksheets entitled "14.0.1" shows that the majority of the factors for the air accounts on page 1 differ between the FY 1996 and BY 1996 data.

Please explain the reasons for the differences and provide any studies to support these differences.

RESPONSE

As explained in response to MPA/USPS-T5-1, there are changes in volume variability factors in the base year. The variability factors for the three network operations (Eagle, Western, and Christmas) are the result of the revised treatment of premium costs. These costs are treated as incremental to Express Mail (in the case of Eagle and Western) and Priority Mail (for the Christmas network). The treatment of system costs is also changed.

Network Costs Factors: The non-premium portion of network contract costs are treated as 100 percent volume variable. For ease of running the transportation computer programs, the premium is extracted by means of the factors in Worksheet 14.0.1. For example, the premium cost of the Christmas network (CNET) amounts to 79.74 percent of CNET costs. The nonpremium costs is 20.26 percent (= 1 - 79.74%) of CNET costs. The factor 0.2026 appears

RESPONSE continued

in Base Year Worksheet 14.0.1. Since CNET costs accrue only to quarter 2 in the Base Year, this factor is the same for all four quarters. Similarly, quarterly factors reflecting the premium costs of Eagle and Western air appear in the Base Year worksheet. (For example, the Eagle premium is 62.76 percent in quarter one, resulting in a factor of .3724 (=1-62.76%) in the worksheet).

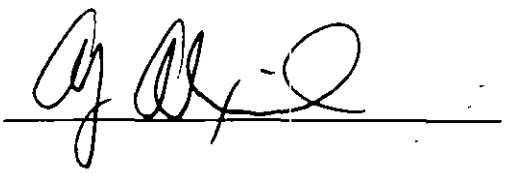
System Cost Factors: System air costs are treated as 100 percent volume variable because the terms of incurrence of these costs have changed. In its Decision in Docket No. R87-1, the Commission found that the then new method of contracting of system air transportation resulted in a volume variability of 95.12 percent. Under this contracting method, the Postal Service paid different rates for air transportation with 40 different airlines. This 95.12 percent variability has been used by the Postal Service since that time. Prior to R87, the Postal Service was required to pay all carriers the same rates for the carriage of mail and to follow an equitable tender rule. Since increases in volume resulted in proportionate increases in cost, air costs were regarded as 100 percent volume variable. The current method of air contracting is virtually the same system. All airlines are paid the same rate, and an equitable tender rule exists. The rationale for the 95.12 percent system variability no longer exists and, therefore, is replaced with 100 percent variabilities in the Base Year.

RESPONSE continued

Miscellaneous Accounts: Prior to BY 1996, the volume variability of three cost accounts (53591, 53595, 53599) had been calculated as a cost-weighted average of the variability of other air accounts. A simplification was made in the Base Year, eliminating this calculation by setting the variability of these accounts to 1.0000. This simplification adds approximately $400,000 in volume variable costs in the Base Year.

DECLARATION

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



Dated: 8/18/97

1. Purchased Transportation

a. Alaskan Nonpriority Air Adjustment

(2) Alaskan Air Adjustment

For Test Year 1998 BR, witness Patelunas shows $115,665,000 of air costs attributed to parcel post (USPS-T-15, WP-E, p. 203). These costs include Alaska nonpreferential air costs and do not reflect an adjustment similar to the one made by the Commission in R94-1 and MC96-3 (*see* Docket No. MC96-3, PRC-LR-5, Part 2, Segment 14, page 37, for development of the adjustment using FY 1995 data).

Witness Hatfield develops transportation costs per cubic foot for the parcel post rate categories (USPS-T-16, Exhibit USPS-16A). These costs are developed without inclusion of any intra-Alaskan nonpreferential air costs (USPS-T-16, Appendix I, page 11). He states that "the Alaskan nonpreferential air costs have not been included because they are accounted for separately in witness Mayes' testimony (USPS-T-37)." (USPS-T-16, Appendix I, page 11, footnote 3).

Witness Mayes develops preliminary rates (USPS-T-37, Workpaper 1.K, pages 1-6) using transportation costs (USPS-T-37, Workpaper 1.E, pages 3-8) developed from the costs of witness Hatfield.

Please explain where and how witness Mayes has accounted for the intra-Alaskan nonpreferential air costs in her rate development.

RESPONSE:

Parcel Post rates were designed to recover all Parcel Post costs, whether or not they were included in the transportation cost estimates contained in Exhibit USPS-6A. The costs used as the basis for the rate development, as shown at line (1) on page 2 of workpaper WP I.I., match the total TYBR costs for Parcel Post with contingency, including intra-Alaska nonpreferential air costs, reported by Postal Service witness Patelunas at USPS-T-15, WP-E, Table E. The markup factor shown at line (8) of page 2 of WP I.I, as applied to the per-piece

costs and to the transportation costs assigned to each rate cell on pages 3-8 of workpaper WP I.E., was set so as to permit recovery of the Alaska air costs, and result in an appropriate cost coverage for Parcel Post. The calculation of the TYAR cost coverage, as shown at page 3 of workpaper WP II.C., uses as its base the total TYAR costs for Parcel Post with contingency, including intra-Alaska nonpreferential air costs, reported by witness Patelunas at USPS-T-15, WP-G, Table E.

1. Purchased Transportation
c. Bound Printed Matter (BPM)
(2) Vehicle Service Driver Costs (Cost Segment VIII)
In the development of parcel post rates, the vehicle service driver costs have been treated as local purchased transportation costs (USPS-T-16, Appendix 1, page 12) and distributed on the basis of cubic feet rather than being included in the per piece rate element (USPS-T-37, Workpaper 1.1, shows the exclusion of these costs from those used to develop the piece rate element). In contrast, for BPM these costs are included in the development of the per piece rate element.
Please explain why the $15,755,000 of BPM (Patelunas WP E, Table D) cost segment VIII costs should not be treated the same way these costs are treated when developing parcel post rates.

Response:

Historically, the cost coverage for Parcel Post has not performed as well as should have been expected, indicating the possibility that the distribution of costs within the subclass and the rates resulting from reference thereto were not as accurate at reflecting the true pattern of cost incurrence as they should have been. Because of this historically poor cost coverage performance, the Postal Service undertook to study the patterns of transportation costs for Parcel Post, the results of which are detailed in the testimony of Postal Service witness Hatfield, USPS-T-16. Bound Printed Matter, on the other hand, has historically demonstrated a healthy cost coverage, suggesting a lower priority in its review.

As was noted in the response to POIR No. 1, Question 1.c.(1), there is additional data available for Parcel Post in the form of cubic feet and the relationship of cubic feet to weight by weight increment. Within Parcel Post, the vehicle service driver costs are first distributed on a cubic feet basis, which is then translated into a cost per pound by weight increment by use of the cube/weight relationship. Such a distribution is not possible for Bound Printed Matter because similar information on the relationship of cubic feet to weight is not available. Similarly, the transportation patterns for Parcel Post have been studied in greater detail than have those of Bound Printed Matter. While Bound Printed Matter may have similar characteristics in terms of intra-SCF movements to those of Parcel Post, we are not certain at this point.

DECLARATION

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

Virginia J. Mayes

Dated: August 18, 1997

RESPONSE OF U.S. POSTAL SERVICE WITNESS HATFIELD
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

POIR No. 1, Question 1. c. (1)

c. Bound Printed Matter (BPM)

(1) Purchased Transportation Costs (Cost Segment XIV)

Witness Hatfield (USPS-T-16) presents a new treatment of purchased transportation costs in the development of parcel post rates. The major difference from the treatment in prior dockets is the identification of intermediate costs which are distributed on the basis of cubic feet (nondistance related) rather than cubic foot-miles (distance related). In contrast, these costs for BPM are distributed on the basis of pound-miles rather than pounds. The intermediate costs include Hawaiian air, Alaskan preferential air, Inter-SCF, Intra-BMC, Highway plant load, Alaskan highway, and off-shore water. (USPS-T-16, Appendix 1, page 11).

Please explain why these intermediate costs for BPM are not treated as nondistance related and distributed on the basis of pounds rather than pound-miles.

RESPONSE:

(1) While the analysis in my testimony concerning the development of Parcel Post unit transportation costs by zone does differ from prior dockets by identifying intermediate transportation costs for both intra-BMC and inter-BMC as non-distance related, my testimony continues to allocate DBMC intermediate transportation costs as distance related. As such, the treatment of intermediate transportation costs for DBMC in my testimony is consistent with the treatment of these same costs in Bound Printed Matter, i.e., they are treated as distance related. Though it is difficult to make generalizations about the transportation patterns of Bound Printed Matter, over three-quarters of bulk Bound Printed Matter volume is in the first three postal zones. This may indicate a significant amount of mailer "zone skipping" which is somewhat analogous to drop-shipping. In addition, bulk Bound Printed Matter has presorting requirements that are somewhat similar to the destination bulk mail center separations associated with DBMC Parcel Post. Consequently, there are some similarities between

Bound Printed Matter and DBMC Parcel Post. Given the uncertainty surrounding the transportation characteristics of Bound Printed Matter, combined with some worksharing similarities with DBMC Parcel Post, it is difficult to state that Bound Printed Matter intermediate transportation costs are non-distance related as is the case with the remaining Parcel Post rate categories.

In addition, the method used to allocate transportation costs to zones for Parcel Post may not be appropriate for Bound Printed Matter. Parcel Post has three rate categories based on varying transportation patterns, as well as cubic foot and cubic foot mile data for each category. These rate categories and the corresponding data make it possible to distinguish between Parcel Post transportation patterns and to allocate intermediate costs differently based on transportation pattern. However, similar information does not exist for Bound Printed Matter, and therefore, it is not possible to differentiate between volumes of BPM that follow different transportation patterns.

RESPONSE OF U.S. POSTAL SERVICE WITNESS HATFIELD
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

POIR No. 1, Question 1. d.

d. Air Taxi Transportation

Air taxi costs are distributed to subclasses based on the accumulated attributions of the other subservices. Workpaper B-14, Worksheet 14.2.1, shows the air taxi distribution to parcel post to be $3,539,000. Witness Hatfield removes Intra-Alaskan nonpreferential air costs from the development of the pound rate elements of parcel post (USPS-T-16, Appendix 1, page 11). These costs represent 95.8 percent (82,495,000/86,108,000) of the total non-air taxi costs. Should the same proportion of air taxi costs also be removed? If not, please explain why.

RESPONSE:

d. No. Intra-Alaska nonpreferential air costs are not included in the development of unit transportation costs by rate category and zone contained in my testimony due to policy considerations. Specifically, if intra-Alaska nonpref air costs were included in the development of unit costs by rate category and zone, they would tend to increase the unit costs associated with intra-BMC Parcel Post dramatically. The burden of the intra-Alaska nonpref air costs would be borne by all intra-BMC Parcel Post users, including those users who do not ship Parcel Post in Alaska. It is my understanding that Ms. Mayes accounts for these costs separately in order not to excessively burden intra-BMC Parcel Post users. Since Parcel Post air taxi costs are incurred both in the lower 49 United States as well as in Alaska, the special consideration does not extend to Parcel Post air taxi costs.

RESPONSE OF U.S. POSTAL SERVICE WITNESS HATFIELD
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

POIR No. 1, Question 7.

USPS-T-25 (Hatfield) — *Please refer to Appendix V. What criteria were used to* determine whether a MODS cost pool was classified as fixed or proportional?

RESPONSE:

The criteria used to determine whether the costs associated with a particular cost pool were treated as fixed or proportional was whether or not the costs in question could be expected to vary with the different degrees of worksharing being studied. Specifically, if the costs in a given cost pool would be expected vary with differing degrees of presorting and/or prebarcoding, then they were categorized as proportional. Likewise if the costs in a given cost pool would not be expected to vary with differing degrees of presorting or prebarcoding, then they were categorized as fixed. As stated by Ms. Daniel in her testimony and in question 8 of this POIR, "Those costs identified as worksharing-related are applied to modeled cost proportionately (proportional column); non-worksharing related costs are applied as constants to modeled costs (fixed column)." For example, the costs in the OCR cost pool would be expected to be greater for nonautomation mail than for automation mail; therefore, those costs are treated as proportional.

DECLARATION

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

Philip A. Hatfield

Dated: 8-18-17

2. BPM Revenue Adjustment Factor

   a. The total FY 1996 BPM single piece revenue is shown as $54,940,121 in USPS-T-38, WP-BPM5. The summation of single piece revenue is $54,872,431 in Library Reference H-171, STBBP96.WK4. Please reconcile the differences which appear in zones 1/2 and zone 7.

   b. The FY 1996 RPW revenue for single piece is shown as $54,726,175 in USPS-T-38, WP-BPM3. Please confirm that this is the correct revenue or provide the appropriate revenue.

   c. The FY 1996 Billing Determinants in H-3 state that the revenue adjustment factor is 99.610582 percent. This appears to have been derived by dividing the RPW revenue ($54,726,175) by the revenue shown in WP-BPM5 ($54,940,121). If the revenue in LR H-171 ($54,872,431) is used, the factor would be 99.7335 percent.

   Please provide the correct revenue adjustment factor showing the details behind its development.

RESPONSE:

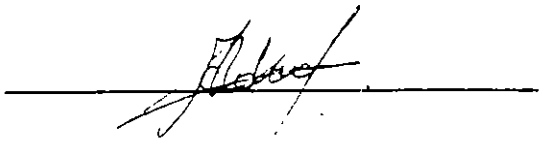
a. The rates applied to the billing determinant volumes for single-piece Bound Printed Matter in Library Reference H-171, STBBP96.WK4 were correct, whereas there were data entry errors in the rates applied to the billing determinant volume in Zone 1/2 at 8 pounds and to the estimated volumes in Zone 7 from 3.5 pounds to 10 pounds. These errors resulted in a slight overstatement of the revenue derived from postage as developed for purposes of calculating the revenue adjustment factor reported in table H-3 of the FY 1996 Billing Determinants and in the revenue figures reported in USPS-T-38, WP-BPM5. The revenues which result from applying the correct rates to the billing determinant volumes are $27,266,624 in Zone 1/2 and $2,568,109 in Zone 7.

b. Confirmed.

c. The correct revenue adjustment factor for single-piece Bound Printed Matter in FY 1996 should be 99.7335 percent, calculated by dividing the RPW revenue for single-piece Bound Printed Matter by the sum of the products derived by multiplying the billing determinant volumes by the correct single-piece rates.

DECLARATION

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



Dated: 8/18/97

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS KANEER
TO PRESIDING OFFICER'S INFORMATION REQUEST NO.1

POIR No. 1 Question 3. The workpapers of witness Kaneer, USPS-T—35, are designated by the letters A through O, with one or more page numbers under each letter. Most of the papers were printed from Excel worksheets contained on disks in Library Reference H-205. Workpaper B, pages 3-7 and Workpaper C, pages 2-5, reference Library Reference PRR-2 in Docket No. MC96-2, but the associated disk does not appear to contain those sheets. To insure that the record is complete, please clarify the source and provide any associated disks for Workpaper B, pages 3-7; Workpaper C, pages 2-5; Workpaper D, pages 1-2; Workpaper F, page 1; Workpaper G, page 1; Workpaper I, page 1; Workpaper J, page 1; Workpaper L, page 1; Workpaper N, page 1; and Workpaper O, page 1.

RESPONSE:

A. With respect to Workpaper B, pages 3-7, the data source is the file entitled "Results" in Docket No. MC96-2, USPS LR-PRR-2 Disk 1. For example, in the Disk 1 worksheet entitled "Barcoded", cell L76 displays the value 87,850,516 pieces, which denotes barcoded five digit pieces in sacks or trays. This figure is reported in USPS LR-H-205 in cell B of the file entitled "Tablenp2", worksheet "Survey Results".

B. With respect to Workpaper C, pages 2-5, the data source is a Classroom Mail Characteristics study draft report dated October 6, 1996. The study's objective was to gather data on the current container and package makeup for classroom mailings from a survey conducted from September 16 though October 13, 1995. Its sample design consisted of 205 post offices which had reported classroom mail acceptance in postal quarter 1, FY95. The report notes that Classroom transactions are very concentrated - 70.9 percent of the revenues are recorded by only six offices. Though still in draft form, this

study is most likely to contain the best available information on which to base the proposed splitting of the 3/5-digit tier into separate 3-digit and 5-digit rate categories. The Excel file containing Workpaper C, pages 2-5, was provided in the Excel file contained in Library Reference H-205 in the file entitled "Tablecl2" in the worksheet named "Classroom Data".

C. With respect to Workpaper D, pages 1-2 of that workpaper are printed listings of the values used as inputs for calculations used in the Excel programs for Nonprofit and Classroom subclasses (Excel files "2C_NP_X3" and "2C_CR_X2"). Using the initial diskette supplied in USPS LR-H-205, Step 5 and 6 rates for subsequent workpapers (Workpaper F, page 1; Workpaper G, page 1; Workpaper I, page 1; Workpaper J, page 1; Workpaper L, page 1; Workpaper N, page 1; and Workpaper O, page 1) could be easily generated by manually changing the cell corresponding to the value for the Cost Coverage Step Factor from 6/6 to 5/6. Instructions to this effect were printed prominently on the cover page to USPS LR-H-205. For simplicity, Nonprofit and Classroom Excel workbooks with the Cost Coverage Step Factor set at both Step 5 and Step 6 for both subclasses were filed on August 14, 1997 in a revised diskette containing all underlying electronic spreadsheets for my workpapers. The Excel worksheets for the requested material for Nonprofit are contained in the Excel file entitled "2C_NP_X3", in the worksheets entitled: "Rate Design Inputs (Step 5)", "Revenue Requirement (Step 5)",

"Pound Rates (Step 5)", "NP Reg. Rate Piece Rate (S5)", "TYAR B.D. (S5)", and "Rate Dev. Bill. Det. (S5)". The Excel worksheets for the requested material for Classroom are contained in the Excel file entitled "2C_CR_X2", in the worksheets entitled: "Rate Design Inputs (Step 5)", "TYAR B.D. (Step 5)", and "Rate Development (2)(S5)."

DECLARATION

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

Kirk T. Kaneer

KIRK T. KANEER

Dated: August 18, 1997

Response of Postal Service Witness Bernstein
to
Presiding Officer's Information Request No. 1

4. The Ramsey model presented in Library Reference H-164, concluding on page 4, contains cross elasticities between the various postal products but does not contain cross elasticities between postal products and the various competing nonpostal products. Elasticities of the latter kind, however, are often included in Ramsey formulations. See, for example, Roger Sherman and Anthony George, "Second-Best Pricing for the U.S. Postal Service," Southern Economic Journal, Vol. 45 (January 1979). Also, cross elasticities to nonpostal products are included in the demand models of parcel post, Priority, and Express Mail. See USPS-T-7, page 98 and USPS-T-8, pages 17 and 37.

a. Please discuss the advantages and disadvantages of formulations with and without cross elasticities of nonpostal products.

b. To the extent to which the required information is available, please provide your best estimates of Ramsey results, including these elasticities.

c. To the extent to which the required information is not available, please provide a discussion of the likely effects of including such elasticities.

RESPONSE:

a and b. Elasticities with competing nonpostal products can be included in a Ramsey pricing model because changes in Postal Service rates can affect the demand for competing firms' products and the firms' profits. Thus, the Ramsey pricing task could be re-stated as the maximization of total producer and consumer surplus, which would then include not only the producer and consumer surplus of the Postal Service and its users but also the producer and consumer surplus associated with competing products.

There are two main disadvantages of including cross elasticities with nonpostal products in the Ramsey price calculations for postal products. The first, which will be discussed in sub-part (c), is that the Ramsey price calculations require not only the cross elasticity between the postal product volume and the competing product's price,

but also information on:

i) the cross-elasticity of the competing firm's volume with respect to the postal price;
ii) the own-price elasticity of the competing firm;
iii) the revenues of the competing firm;
iv) the mark-up of the competing firm's price over its marginal cost; and
v) the reaction of the competing firm's price to changes in the postal price.

Little, if any, of the above information in readily available for the two competing firms that are included in Postal Service demand equations, Federal Express and *United Parcel Service (UPS)*.

A second disadvantage of including nonpostal cross-elasticities in the Ramsey price calculations of postal prices is philosophical. Even if the all the required information were available, the resulting model would still not be a complete Ramsey pricing model. A complete Ramsey pricing model would determine efficient prices of postal products *and* related nonpostal products. See, for example, Ronald R. Braeutigam, "Optimal Pricing with Intermodal Competition," American Economic Review, Vol. 69 (1979). Yet, neither the Postal Service nor the Postal Rate Commission has any direct control over the prices of other firms, making the exercise theoretically interesting but of little practical value.

At the same time, market conditions may act to generate the efficient prices for nonpostal firms, which occurs when the nonpostal firms set price equal to marginal cost of production. However, as will be shown in sub-part c, if the competing firms are pricing at marginal cost, then the Ramsey prices that result with cross elasticities of competing firms are identical to the prices that result without inclusion of those cross-elasticities.

Response of Postal Service Witness Bernstein
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c. A Ramsey pricing equation including competition with nonpostal firms (often referred to as Ramsey pricing with rivalry) is presented below. Product 1 is produced by the Postal Service and product 2 is produced by a nonpostal firm. [For simplicity, cross-elasticities between postal products are ignored in this analysis].

Equation(1):

$$\left(\frac{P_1 - M_1}{P_1}\right)\left[E_{11} + E_{12}\left(\frac{dP_2}{dP_1}\frac{P_1}{P_2}\right)\right] + (1-k)\left(\frac{P_2 - M_2}{P_2}\right)\left[E_{21}\frac{R_2}{R_1} + E_{22}\left(\frac{dP_2}{dP_1}\frac{P_1}{P_2}\right)\frac{R_2}{R_1}\right] = -k$$

where

P_1 is the price of the postal product;

M_1 is the marginal cost of the postal product;

E_{11} is the own-price elasticity of the postal product;

E_{12} is the cross-price elasticity of the postal product with respect to the price of the nonpostal product;

dP_2/dP_1 is the change in the price of the nonpostal product in response to a change in the price of the postal product;

P_2 is the price of the nonpostal product;

M_2 is the marginal cost of the nonpostal product;

E_{21} is the cross-price elasticity of the nonpostal product with respect to a change in the price of the postal product;

R_2 and R_1 are the revenues of the nonpostal and postal products, respectively;

E_{22} is the own-price elasticity of the nonpostal product; and

k is the Ramsey leakage constant.

A first observation is that if the nonpostal firm is pricing at marginal cost, which includes a normal profit for the private competing firm, then the Ramsey equation reduces to the inverse elasticity rule. Note that this condition requires that the response of the nonpostal firm to a change in postal prices (dP_2/dP_1) is zero, which it will be under conditions in which the nonpostal firm is operating in a market with marginal cost pricing.

If cross-elasticities exist and the nonpostal firm is pricing above its marginal cost, then the Ramsey price with rivalry may differ from the Ramsey price in which rivalry is not considered. The direction of the departure depends critically on the response of the nonpostal firm to changes in the price of the postal product. Assume for the moment that the price of the nonpostal firm does not change in response to a change in the price of the postal product (i.e.,$dP_2/dP_1 = 0$). In this case, the Ramsey price of the postal product with rivalry will be greater than when rivalry is not considered. This can be seen by re-writing the above equation with dP_2/dP_1 equal to 0:

Equation (2):

$$\left(\frac{P_1 - M_1}{P_1}\right) E_{11} + (1-k)\left(\frac{P_2 - M_2}{P_2}\right) E_{21} \frac{R_2}{R_1} = -k$$

$[(P_1 - M_1)/P_1]E_{11}$ is the familiar term from the Inverse Elasticity Rule (IER). The other term on the left-hand side of the equation has a positive sign since P_2 is assumed greater than M_2, and E_{21} is assumed greater than zero. As a consequence, the Ramsey price of the postal product (P_1) will have to be higher than in the case without rivalry to offset the positive value of the other term and maintain equality with k.

The intuition of this result is that increases in the price of the postal product increase demand for the nonpostal product (because of the cross-elasticity effect) and with nonpostal price above marginal cost, this increase in demand increases the profits of the nonpostal firm. These profits would be included as part of the total social welfare from Ramsey pricing. Note that "profits" here refers to "economic profits" defined as profits above what would be expected from a normal operation. If the economic profits are small, the effect on Ramsey prices of the nonpostal products will be small. If the nonpostal firms economic profits are substantial, then the Ramsey price of the postal product could be meaningfully affected. However, it must be noted that if the nonpostal firm's price significantly departs from its marginal cost, then there is an important loss of economic efficiency in the market for the nonpostal product.

The foregoing discussion shows that when the nonpostal firm is pricing above marginal cost ($P_2 - M_2 > 0$) and the nonpostal firm's price is unchanged by a change in the postal product price ($dP_2/dP_1 = 0$), the Ramsey price with rivalry will be above the price without rivalry. The opposite result can occur if the nonpostal price is positively related to changes in the postal price ($dP_2/dP_1 > 0$), meaning, for example, that an increase in the price of a postal product contributes to the increase in the price of the nonpostal competing product. Under these conditions, the Ramsey pricing equation

includes all terms with dP_2/dP_1. As compared with the equation without this condition, the following terms are included on the left-side of Equation (2).

$$\left(\frac{P_1-M_1}{P_1}\right)\left[E_{12}\left(\frac{dP_2}{dP_1}\frac{P_1}{P_2}\right)\right] + (1-k)\left(\frac{P_2-M_2}{P_2}\right)\left[E_{22}\left(\frac{dP_2}{dP_1}\frac{P_1}{P_2}\right)\frac{R_2}{R_1}\right]$$

If one assumes for simplicity that the postal product and the nonpostal product have approximately the same price, then P_1/P_2 approximately equals 1. Eliminating this term yields the following additional terms resulting from assuming $dP_2/dP_1 > 0$:

$$\left(\frac{P_1-M_1}{P_1}\right)\left[E_{12}\left(\frac{dP_2}{dP_1}\right)\right] + (1-k)\left(\frac{P_2-M_2}{P_2}\right)\left[E_{22}\left(\frac{dP_2}{dP_1}\right)\frac{R_2}{R_1}\right]$$

The first term above is positive, but the second term is negative owing to the fact that E_{22} (the own-price elasticity of the nonpostal firm) is negative. It would be quite easy for the sum of the above terms to be negative (and meaningfully so), especially if one considers the case where the competing firm is UPS whose revenues (R_2) are many times the revenues of either Priority Mail or parcel post (R_1).

Two conclusions from the above analysis with $dP_2/dP_1 > 0$ are:

1) Ramsey prices of postal products including rivalry will be less than if $dP_2/dP_1 = 0$

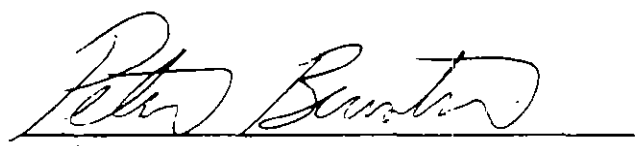
2) Ramsey prices of postal products including rivalry could be less than the Ramsey prices when rivalry is not considered.

The intuition of the second result is as follows. With $dP_2/dP_1 > 0$, a change in postal product price causes a change in the same direction (though not necessarily of equal magnitude) in the price of the nonpostal product. If the nonpostal product price is above its marginal cost (which is a necessary condition for any of this analysis to matter), then there is a loss of efficiency in the nonpostal product market. If the nonpostal price moves in the same direction as the postal product price (i.e., $dP_2/dP_1 >0$), then *lowering* the postal product price will produce a decline in the nonpostal product price. This decline in the nonpostal price will move that price closer to its marginal cost, thereby increasing total social welfare. This point is especially true if the revenues of the nonpostal product are much larger than the revenues of the competing postal product.

Ultimately, the Ramsey prices of postal products are affected by cross-elasticities with nonpostal products only if the nonpostal firms are pricing above marginal cost. Both Federal Express and UPS operate in competitive markets with free entry, economic conditions that lead to marginal cost pricing. For that reason, the Ramsey model without cross-elasticities of nonpostal firms is likely to yield results quite similar to those that would result from a model with nonpostal firms.

DECLARATION

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



(Signed)

8/15/97

(Date)

RESPONSE OF POSTAL SERVICE WITNESS TAUFIQUE TO PRESIDING OFFICER'S INFORMATION REQUEST NUMBER 1

Question 5.

Workpaper RR-C, page 1, which accompanies USPS-T-34, shows an implicit cost coverage for advertising matter of 182.17 percent and for editorial matter of 88.93 percent. The column above the former figure shows a subtotal labeled "Advertising Total" and another subtotal labeled "Total Pounds." Since this column is based on an assumption that all of the material is advertising material, please explain why the two subtotals should be different.

Response

The two subtotals should not be different because, as correctly stated in the query, this column is based on the assumption that all of the material is advertising material. The subtotal "Total Pounds" is incorrect, and has been deleted. The correction of this error leads to a cost coverage of 130.61 percent for all advertising matter. See my workpaper errata filed on August 14, 1997.

RESPONSE OF POSTAL SERVICE WITNESS TAUFIQUE TO PRESIDING OFFICER'S INFORMATION REQUEST NUMBER 1

Question 6.

Workpaper WC-I, page 1, which accompanies USPS-T-34, contains a column headed "Billing Det." Please provide a source for the figures in this column.

Response

This column is not used in the analysis provided in workpaper WC-I, which compares the current rates to proposed rates. The numbers in this column therefore have been deleted in my workpaper errata filed on August 14, 1997.

DECLARATION

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

ALTAF H. TAUFIQUE

Dated: August 18, 1997

REPSONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO *PRESIDING OFFICER'S INFORMATION REQUEST NO. 1*

POIR No.1 Question 8. . USPS-T-29, page 8. Referring to Exhibit USPS-T-29A, witness Daniel states

> Those costs identified as worksharing-related are applied to modeled cost proportionately (proportional column); non-worksharing related costs are applied as constants to modeled costs (fixed column). This testimony determines that the letter cost pool activities that are in the mailflow or bundle sorting models, such as "*mods bcs/*," "*manl*, "*mods ocr/*," "spbs Oth," *etc., are worksharing*-related and are related to the modeled costs proportionately.

If letter pool cost pool activities are already "in the mailflow or bundle sorting models," why is any proportional adjustment necessary? Please discuss in detail.

RESPONSE:

Mail flow models are simplifications of reality and use inputs that are sometimes not class specific (such as MODS productivities). Because of this, the costs calculated by mail flow models may not necessarily be equal to the cost of the same activities as measured in the CRA. Insofar as modeled costs do not match comparable CRA costs, proportional and fixed adjustments are used to reconcile the two.

DECLARATION

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

Sharon Daniel

SHARON DANIEL

Dated: August 18, 1997

RESPONSE OF U.S. POSTAL SERVICE WITNESS FRONK TO
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

POIR NO.1/QUESTION 9. In USPS-T-32, page 38, it states that a [sic] quantitative consumer research was conducted. Was any research conducted to determine the number of businesses that would be interested in offering PRM to their customers? If not, why not?

RESPONSE: Please see report by contractor Price Waterhouse entitled, "Qualitative Market Research - Prepaid Reply Mail Concept, In-depth Interviews with Businesses-Final Report" (USPS Library Reference H-226). Note that the data in this report are not statistically projectible to all businesses.

DECLARATION

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

David R. Fronk

David R. Fronk

8-15-97

Date

RESPONSE OF POSTAL SERVICE WITNESS O'HARA
TO PRESIDING OFFICER'S INFORMATION REQUEST NO.1

10. Volume Forecasting

a. Please describe the procedures employed to forecast international mail volume and revenue for FY 1997, FY 1998 (test year before rates), and FY 1998 (test year after rates). USPS-T-30, Workpapers I, II and IV. Also, provide the underlying calculations for the international mail quarterly volume forecasts for each of the above fiscal years and FY 1999.

RESPONSE:

It is my understanding that the information requested is presented on the attached pages.

International Mail

I. Overview

The methodology employed to forecast international mail volume is different from that used in the previous omnibus rate case, R94-1. The details of the model are considered to be commercially sensitive. Quarterly Postal Service and economic data are used to construct an econometric model of the total international mail market.

A. Base Year Volume

While the base method is not used, the base year volume for international mail would be the sum of the volumes of the four postal quarters 1996 three and four plus 1997 one and two, which equals 987.185 million pieces. The individual quarterly volumes are:

1996:3	242.591
1996:4	274.183
1997:1	216.968
1997:2	253.443

B. Population

Population is used in the model as one of the factors accounting for the growth in the utilization of international postal services.

C. Seasonality

The impact of seasonal changes in the use of international postal services is included in the model.

D. Net Trend

Net trends were not used.

E. Quarter Length

The fact that postal fiscal year is composed of 13 accounting periods and the postal quarters are distributed as indicated below is taken into account in the model.

Fall: 3/13 Spring: 3/13 Winter: 3/13 Summer: 4/13

F. Aggregate Economic Activity

The impacts of international trade are taken into account as factors influencing the use of international postal services.

G. Other Factors

The model includes other factors such as trends, as well as events such as Canadian postal strikes, that influence international mail.

H. Price

The model includes the impact of international mail prices on international mail volumes. The inflation-adjusted price of aggregate international postal prices is used. The estimated own-price elasticity is -0.6038.

II. Postal Quarter Volume Forecasts

The postal quarterly volume forecasts for 1997:1 through 2000:1 in the before-rates environment are calculated via the model. In the after-rates environment all of the factors are held constant, and international mail prices are assumed to increase by 3.2 percent. The new international mail prices are assumed to take effect on October 1, 1997. The forecasts are shown below:

Pqtr	Before-Rates Volume	Rate Multiplier	After-Rates Volume
1997:1	216.968	1.000000	216.968
1997:2	253.443	1.000000	253.443
1997:3	208.002	1.000000	208.002
1997:4	275.268	1.000000	275.268
1998:1	244.666	0.985014	240.999
1998:2	269.057	0.981161	263.989
1998:3	219.796	0.981161	215.655
1998:4	286.202	0.981161	280.810
1999:1	252.944	0.981161	248.179
1999:2	276.829	0.981161	271.614
1999:3	226.560	0.981161	222.292
1999:4	294.251	0.981161	288.708
2000:1	259.396	0.981161	254.509

III. Government Fiscal Year Forecasts

The government fiscal year forecasts are obtained from the following equations:

1997: (53.5/66)*1997:1 + 1997:2 + 1997:3 + 1997:4 + (13.5/66)*1998:1

1998: (52.5/66)*1998:1 + 1998:2 + 1998:3 + 1998:4 + (14.5/66)*1999:1
1999: (51.5/66)*1999:1 + 1999:2 + 1999:3 + 1999:4 + (15.5/66)*2000:1

Accordingly, the forecasts for the government fiscal years 1997 through 1999 are:

GFY	Before-Rates Volume	After-Rates Volume
1997	962.634	961.884
1998	1,025.247	1,006.682
1999	1,055.932	1,036.039

IV. Results in Tabular and Spreadsheet Form

These results are presented in tabular form in the attached Table 1. The results are also available on diskette in spreadsheet form in Library Reference-H-227.

INTERNATIONAL MAIL VOLUME FORECASTS

PQ	Before-Rates Volume	Rate Multiplier	After-Rates Volume
1997:1	216.968	1.000000	216.968
1997:2	253.443	1.000000	253.443
1997:3	208.002	1.000000	208.002
1997:4	275.268	1.000000	275.268
1998:1	244.666	0.985014	240.999
1998:2	269.057	0.981161	263.989
1998:3	219.796	0.981161	215.655
1998:4	286.202	0.981161	280.810
1999:1	252.944	0.981161	248.179
1999:2	276.829	0.981161	271.614
1999:3	226.560	0.981161	222.292
1999:4	294.251	0.981161	288.708
2000:1	259.396	0.981161	254.509

Rate Multiplier 1998:1 = 13.5/66 + (1.032^-0.6038) * 52.5/66
Rate Multiplier 1998:2 onwards = (1.032^-0.6038)

GFY ADJUSTMENTS

PQ	Before-Rates Volume	After-Rates Volume
1997:0	175.876	175.876
1997:1	216.968	216.968
1997:2	253.443	253.443
1997:3	208.002	208.002
1997:4	275.268	275.268
1997:5	50.045	49.295
1998:0	194.620	191.704
1998:1	244.666	240.999
1998:2	269.057	263.989
1998:3	219.796	215.655
1998:4	286.202	280.810
1998:5	55.571	54.524
1999:0	197.373	193.655
1999:1	252.944	248.179
1999:2	276.829	271.614
1999:3	226.560	222.292
1999:4	294.251	288.708
1999:5	60.919	59.771
2000:1	259.396	254.509

PFY FORECASTS
PQ1+PQ2+PQ3+PQ4

PFY	Before-Rates Volume	After-Rates Volume
1997	953.681	953.681
1998	1019.721	1001.453
1999	1050.584	1030.792

GFY FORECASTS
PQ0+PQ2+PQ3+PQ4+PQ5

GFY	Before-Rates Volume	After-Rates Volume
1997	962.634	961.884
1998	1025.247	1006.682
1999	1055.932	1036.039

International Mail Revenues

International mail revenues are developed as follows:

1. For postage, forecast volumes for FY97 and TYBR are multiplied by a base-year revenue per piece of $1.339723. This is derived from 1996 RPW international volume (998,645) and revenue (total international revenue of $1,607,552 less foreign postal transactions of $251,728 and international miscellaneous fees of $17,917). The forecast TYAR volumes are multiplied by 1.339723 * 1.032, where 3.2% is the assumed rate increase noted in Section II of Attachment A. See USPS-T-30, WP IV, p. 3, line 17; WP I, p. 3, line 17; and WP II, p. 3, line 14.
2. Fee revenue (certificates of mailing) is developed on page 2 of this Attachment.
3. Terminal and Transit revenue is assumed to be constant at the 1996 RPW level of $252,000 (000).

Certificate of Mailing Fee Revenues

INTERNATIONAL	FY 1996	FY 1997	TYBR	TYAR
BASIC	8,761	8,009	8,530	9,136
FIRM BOOK MAILING	0	0	0	0
BULK: First 1,000 pcs 3/	880	804	856	917
Each add'l. 1,000 pcs	1,231	1,126	1,199	1,345
TOTAL	10,872	9,939	10,585	11,398

DECLARATION

I, Donald J. O'Hara, hereby declare, under penalty of perjury, that the foregoing Docket No. R97-1 interrogatory responses are true to the best of my knowledge, information, and belief.

Donald J. O'Hara

8-18-97
Date

RESPONSE OF POSTAL SERVICE WITNESS TOLLEY
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

10. b. Refer to Exhibit USPS-6A, Tables 1, 2, 3 and 4, and Library Reference H-173, "Before and After-Rates Volume Forecasting Spreadsheets." Please provide the formula used to generate the aggregate GFY 1999 volume forecasts from quarterly figures.

RESPONSE:

The formula used in Library Reference H-173 is the following:

GFY 1999 Volume = (51.5/66)•(1999Q1 vol) + ∑(1999Q2 thru 1999Q4 vol)

This formula is incorrect. The correct formula should be:

GFY 1999 Volume = (51.5/66)•(1999Q1 vol) + ∑(1999Q2 thru 1999Q4 vol) + (15.5/66)•(2000Q1 vol)

Appropriate revisions to Exhibit USPS-6A will be filed at a later date.

RESPONSE OF POSTAL SERVICE WITNESS TOLLEY
TO PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

10. c. In Library Reference H-173, spreadsheets O_R97BR.WK4 and OF_R97AR.WK4, witness Tolley presents quarterly FY 1996 volumes for First-Class single piece, presort and automation letters and cards, and Standard (A) bulk rate regular presort and automation categories. These FY 1996 volumes in Library Reference H-173 are different from the corresponding FY 1996 volumes reported as SPLY figures in quarters one through three, FY 1997 Revenue, Pieces, and Weight (RPW) reports. Please explain the difference between the FY 1996 quarterly volumes shown in Library Reference H-173 and quarters one through three, FY 1997 RPW reports.

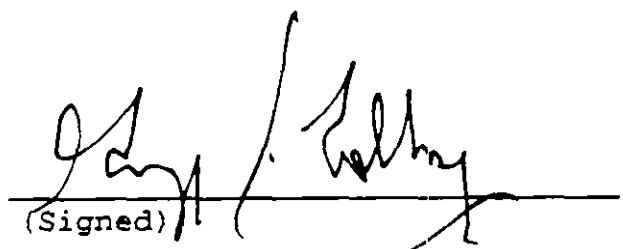
RESPONSE:

The differences in 1996 quarterly volumes reported in Library Reference H-173 and those reported in the 1997 RPW reports are due to differences in the conversion of pre-classification reform volumes into post-classification reform mail categories for presentational purposes.

Specifically, the RPW system equates "single-piece" volume with nonpresort volume prior to classification reform, while Library Reference H-173 excludes nonpresort ZIP+4 and prebarcoded letters, flats, and cards from the calculation of single-piece mail. The RPW system also considers mail which received ZIP+4 discounts to be nonautomated, while ZIP+4 mail was combined with prebarcoded mail to produce the automated mail figures presented in Library Reference H-173 in 1996.

DECLARATION

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



(Signed)

8-15-97

(Date)

Response of Postal Service Witness Gerald L. Musgarve
to
Presiding Officer's Information Request N0. 1,
Question 10(d)

10.d. Below are selected quarterly values of the price for consumer spending used by witness Tolley and Musgrave to deflate postal prices for volume forecasting purposes.

Postal Quarter	Tolley's Price Index[a]	Musgrave's Price Index[b]
1997.1	1.110	1.106
1997.2	1.115	1.111
1997.3	1.122	1.128
1997.4	1.129	1.135
1998.1	1.136	1.142
1998.2	1.143	1.150
1998.3	1.150	1.158
1998.4	1.158	1.166
1999.1	1.166	1.174
1999.2	1.174	1.182
1999.3	1.183	1.190
1999.4	1.191	1.199

[a] Variable PC in LR-H-173, Spreadsheet EC_R97.WK4.
[b] Variable PIDC in LR-H-125, Spreadsheets FEMR97.WK4, FEMR97A.WK4, FPMR97.WK4 and FPMR97A.WK4.

Please provide the source of the above indices and explain the differences in their values.

Response:

Dr. Musgrave's revised price index data and Dr. Tolley's original data used to forecast volumes are now the same from 1997:3 to 2000:1. See Dr. Musgrave's revised testimony and errata.

Dr. Musgrave's values for 1997:1 and 1997:2 were from DRI's April database, and reflect the actual values at that time. The values used by Dr. Tolley all come from DRI's February data base. The source of the forecasted values of these price indices from 1997:3 onward are from DRI's TREND25YR0297 database.

DECLARATION

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

G. Musgrave

Dated: 8/18/97

Response of United States Postal Service Witness Patelunas
to
Presiding Officer's Information Request No. 1

POIR No. 1:

10. e. Witness Patelunas' Exhibit 15A at 5-6 shows the mail volume change factors used in the CRA/Cost roll-forward model and is sourced to the computer file "rat2fact." A comparison of the "rat2fact" file found in USPS Library Reference H-6 at 474 (the electronic data file "rat2fact" is located at \psmand03\fy97rcr\control) shows a significant difference in the volume change factor for First-Class nonpresort postcards. USPS Exhibit 15A reports a -.121894438 change factor, while the "rat2fact" file shows a +.010895759 change factor.

(1) Please explain the discrepancy between the two factors and provide any necessary corrections to USPS Exhibit 15A or the file "rat2fact."

(2) Please reconcile apparent differences in volumes between USPS Exhibit 15A, USPS Exhibit 6A, and USPS-T-5, Workpaper A-1 at 129-30.

RESPONSE

(1) The change factors in the "rat2fact" file are correct. Exhibit USPS-15A has been revised to agree with the "rat2fact" file.

(2) Base Year 1996 for USPS-T-5 and USPS-T-15 use Fiscal Year 1996 Revenue, Pieces and Weight. USPS-T-6 does not use FY 1996 as its "base period," instead is uses the four Postal Quarters commencing with the third quarter of FY 1996 and ending with the second quarter of FY 1997. USPS-T-5 uses Exhibit USPS-6A for Fiscal Year 1997 and Test Year 1998 Before Rates, and USPS-T-6 Table 1, Adjusted After Rates for Test Year 1998 After Rates. USPS-T-15 uses Exhibit USPS-6A to calculate the Mail Volume change factors in Exhibit-15A; the amounts for FY 1997 and TY 1998 Before Rates are rounded Exhibit USPS-6A amounts. USPS-T-15 uses USPS-T-6, Table 1, Adjusted After Rates for the reports shown in Exhibit USPS-15J.

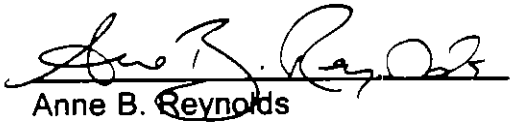
DECLARATION

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

Dated: 8/18/97

CERTIFICATE OF SERVICE

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



Anne B. Reynolds

475 L'Enfant Plaza West, S.W.
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August 18, 1997