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

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POSTAL RATE COMMISSION OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 2000

#### Docket No. R2000-1

## RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA (NAA/USPS-T28-11-14)

The United States Postal Service hereby provides the responses of witness

Daniel to the following interrogatories of the Newspaper Association of America:

NAA/USPS-T28—11-14, filed on March 7, 2000.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr. Chief Counsel, Ratemaking

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Anthony Alverno Attorney

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NAA/USPS-T28-11: Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments."

- a. In Line 7 ("delivery in-office (6.2) 6.1"), costs are allocated according to proportions in Line 6 ("delivery in-office (6.1) tally").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- b. In Line 8 ("del. route (7.1) piece"), costs are allocated according to proportions in Line 1 ("volume").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- c. In line 9 ("del. access (7.2) piece"), costs are allocated according to proportions in line 1 ("volume").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- d. In Line 11 ("del. support (7.4) sum 6&7"), costs are allocated according to the proportions of the sum of Lines 10, 9, 8, and 6.
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- e. In Line 12 ("vehicle service (8) cube"), costs are allocated according to the proportions in Line 3 ("cubic feet").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- f. In Line 14 ("air/water trans. (14) weight"), costs are allocated according to weight.
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- g. In Line 16 ("Other weight"), costs are allocated according to weight.
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.

# **RESPONSE:**

 a. (i.) Please see USPS LR-I-1 "Summary Description of USPS Development of Costs By Segments and Components, FY1998" page 6-3 Section 6.2.1. In-office support costs account for 3.5% of total ECR costs.

(ii). N/A

b. (i.) Even though according to USPS LR-I-1 page 7-4 Section 7.1.4 "[v]olume variable routine looping/dismount costs are distributed to classes and subclasses of mail on the basis of the estimated weight of mail carried on routine loops/dismounts, as determined from CCS and RPW," these costs have been allocated on the basis of pieces in the weight study library references. However, the testimony acknowledges that to the extent these costs are weight related, the overstatement of costs due to weight because of the assumption that elemental load costs are directly proportional to weight should compensate for this. Route costs account for 2.1% of total ECR costs.

(ii) N/A

c. (i.) Please see USPS LR-I-1 page 7-6 Section 7.2.4. Access costs account for 2.0% of total ECR costs.

(ii) N/A

- d. (i.) Please see USPS LR-I-1 page 7-9 Section 7.5.4. Street support costs account for 8.0% of total ECR costs.
   (ii) N/A
- e. (i.) Please see USPS LR-I-1 page 8-3 Section 8.1.4. See also the response to interrogatory ADVO/USPS-T28-4a. Vehicle Service Driver costs account for 3.0% of total ECR costs.

(ii) N/A

- f. (i.) Please see USPS LR-I-1 pages 14-2 and 14-7 Sections 14.1.1.1 and 14.1.4.1 respectively. See also the response to interrogatory ADVO/USPS-T28-4b. Air and water transportation costs account for 0.1% of total ECR costs.
  (ii) N/A
- g. (i.) Other costs consist primarily of postmaster and claims and inquiry and related indirect costs such as employee labor relations, time and attendance, space, and benefits, as well as stamps and dispenser costs. They also may include training, international mail supplies, and indemnities. USPS LR-I-1 page 1-2 Section 1.1.4 notes that postmaster costs are distributed on the basis of

revenue relationships and page 16-2 Section 16.1.4 notes that stamps and dispenser costs are distributed in proportion of window service costs for stamp sales. Weight was chosen to counter the claim that the study was understating the impact of weight. An alternative approach would have been to allocate "other" costs in the same proportion as total costs minus "other." "Other" costs account for 1.2% of total ECR costs.

(ii) N/A

**NAA/USPS-T28-12:** Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments."

- a. In Line 10 ("elem. Load (7.3) shape&wt"), costs are allocated according to proportions in Line 2 ("weight").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- b. In Line 13 ("delivery rural (10) shape&pc"), costs are allocated according to Line 1 ("volume").
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
- c. In Line 15 ("hwy/rail trans. (14) cube"), costs are allocated according to cubic feet.
  - i. Please provide the basis for this allocation rule.
  - ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.

#### **RESPONSE:**

- a. (i-ii.) Even though according to USPS LR-I-1 page 7-8 Section 7.3.4 "[v]olume variable costs for letter route load time at customer delivery points are distributed ... on the basis of proportion of pieces," these costs have been allocated on the basis of weight in the weight study library references as explained in USPS-T-28 pages 8-9. Elemental load costs account for 22.2% of total ECR costs.
- b. (i-ii.) Please see USPS-T-28 page 9 Section IV.C.5. Rural carrier costs account for 18.4% of total ECR costs.
- c. (i-ii.) Please see response to interrogatory ADVO/USPS-T28-4b. Highway and rail transportation costs account for 2.5% of total ECR costs.

**NAA/USPS-T28-13:** Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments." On page 2, you provide the following regression labeled "Pound Rated Mail" (workbook LR92bECR.xls):

## y = 0.0247x - 0.0495

- a. Please confirm that x is the average weight in each weight increment and that all observations in the 3.0 to 3.5 ounce weight increment are pound-rated.
- b. If you are unable to confirm (a) above, please provide the correct definitions of x and y and the observations of data used in the regression.
- c. Please provide the basis for the cited equation being a reliable basis for ascertaining the effect of weight on unit costs, including measures of statistical confidence in the individual observed values of y, x, and the estimated coefficients.
- d. Please explain in detail the significance you attach to the estimated coefficients.
- e. Please explain what significance you attach to the increase in unit costs for the 15 to 16 ounce increment.
- f. Please confirm that deleting the observation for the 3.0 to 3.5 ounce weight increment from the data used in the regression produces the following:

$$y = 0.0265x - 0.0708$$

g. Please explain what significance you attach to the result described in (f.) above.

#### **RESPONSE:**

a. The equation cited above appears on page 11 of Section 2 in USPS LR-I-92 (or

the 47<sup>th</sup> page of the library reference.) For the purpose of this graph, "x"

represents ounce per piece.

b. "y" represents the unit cost for a piece with "x" weight per piece.

c-d. This equation has not been represented to be a basis for ascertaining the effect of weight on unit cost and has not been used as such in the Postal Service's case. It is the output of the Excel model that calculates a trendline giving each data point equal weight instead of volume weighting the data. According to the EXCEL function LINEST, the standard error values for the slope, intercept, and y estimate are 0.006, 0.062, and 0.092, respectively. An analysis of pound-rated ECR mail also appears on page 13 of Section 2 in USPS LR-I-92 "Std. A ECR All

Shapes Test Year Pound-Rated Unit Costs by Combined Weight Increments." Here, the data points are more evenly weighted and the equation is y=0.0176x-0.0048.

- e. There are 13,060,565 pieces in the 15-16 ounce increment out of 33,630,517,437, or 0.04% of the volume. Its significance should reflect its relative portion of the total. Also, transportation costs have been allocated on the basis of pounds implicitly assuming equal transportation cost per pound in every weight increment. However, higher weight per piece results in higher avoided transportation cost per piece due to dropshipping. Thus, even with a similar dropship profile per weight increment, higher weight-per-piece pieces have lower transportation costs per piece and this implies that the true cost of heavier weight-per-piece pieces is overstated.
- f. Confirmed for the data on page 11 of Section 2 in USPS LR-I-92. Removing the observation for the 3.0 to 3.5 ounce weight increment on page 13 of Section 2 in USPS LR-I-92 results in the equation y=0.0175x 0.0035.
- g. Please see the response to subparts (c-d).

NAA/USPS-T28-14: Please refer to USPS-LR-I-92, Section 1, worksheet titled "3CREG all (detailed)." There you provide the following regression labeled "Std. A Regular All Shapes Pound Rated" (workbook LR92aREG.xls):

y = 0.0628x - 0.133

- a. Please confirm that x is the average weight in each weight increment and that you assume that **no** observations in the 3.0 to 3.5 ounce weight increment are pound-rated.
- b. If you are unable to confirm (a), please provide the correct definitions of x and y and the observations of data used in the regression.
- c. Please provide the basis for the cited equation being a reliable basis for ascertaining the effect of weight on unit costs, including measures of statistical confidence in the individual observed values of y, x and the estimated coefficients.
- d. Please explain in detail the significance you attach to the estimated coefficients.
- e. Please explain the significance you attach to the increase in unit costs for the 15 to 16 ounce weight increment.
- f. Please explain why the pound-rated regression for Regular excludes the 3.0 to 3.5 ounce category while the pound-rated regression for ECR includes the 3.0 to 3.5 ounce category.

#### **RESPONSE:**

- a. Confirmed.
- b. N/A
- c-d. This equation has not been represented to be a basis for ascertaining the effect of weight on unit cost and has not been used as such in the Postal Service's case. It is the output of the Excel model that calculates a trendline giving each data point equal weight instead of volume weighting the data. According to the EXCEL function LINEST, the standard error values for the slope, intercept, and y estimate are 0.013, 0.135, and 0.178, respectively.
- e. There are 57,681,913 pieces in the 15-16 ounce increment out of 42,783,773,194, or 0.13% of the volume. Its significance should reflect its relative portion of the total. Also, please see the response to NAA/USPS-T28-13(e).
- f. The trendlines for pound-rated mail shown in USPS LR-I-92 were not intended to be used in any analysis. If I had intended to use regressions to analyze the cost of pound-rated mail, I would volume weighted the data and presented two

separate regressions with both 3.0 and 3.5 ounces used as breakpoints as is done in Table 3.

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## DECLARATION

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I

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.

<u>Slourov</u> S:HA DANIEL

3/21/00 Dated: \_\_

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# **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.

Anthony Alverto

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-1137 (202) 268-2997; Fax –6187 March 21, 2000

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