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

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POSTAL RATT COMPLESION OFFICE OF THE SCORETARY

POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS HUNTER TO INTERROGATORIES OF UNITED PARCEL SERVICE (UPS/USPS-T5-35-57)

The United States Postal Service hereby provides the responses of witness Hunter to the following interrogatories of United Parcel Service: UPS/USPS-T5-35-57,

filed on March 22, 00.

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

Kenneth N. Hollies

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.

1/2 Hollin

Kenneth N. Hollies

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 (202) 268–3083 Fax –5402 April 5, 2000

UPS/USPS-T5-35. Confirm that each record in the BRPW system data base you used represents all shipments for a given rate category for an entire AP at the same office. If you do not confirm, define what a record represents.

RESPONSE. Not confirmed. Each input record provides combined rate

category and rate date period applicable revenue, volume and weight totals from

all mailings entered at an office during an AP.

UPS/USPS-T5-36. For a plant-verified Parcel Post drop[]shipment, is the information captured in the BRPW system that which appears on PS Form 8125, or that which appears on the postage statement (PS Form 3605)?

RESPONSE. See my response to UPS/USPS-T5-31.

UPS/USPS-T5-37. Refer to USPS-LR-I-230, page I, which states, "For the FY 1998 period, a sixth panel comprised of automated offices, adjusted for residual non-automated office activity, is used for the permit imprint Parcel Post mail category."

- (a) Why was a sixth panel used for the permit imprint Parcel Post mail category in FY 1998?
- (b) Was a sixth panel for the permit imprint Parcel Post mail category used in FY 1999? Explain why, or why not.
- (c) Define and describe the "residual non-automated office activity" which is referred to there.

RESPONSE.

a. Under the BRPW statistical design methodology, as described on page 2

of LR-USPS-I-26/R2000-1 and again on page 1 of the referenced LR-

USPS-I-230/R2000-1, a separate panel is used for each targeted indicia

and mail class combination. The referenced permit imprint Parcel Post

panel of automated offices is therefore used to develop the related

estimates of revenue and volume totals provided in Tables 1-3 of my

testimony for this mail category.

- b. Yes. See my response to part (a).
- Not all permit imprint Parcel Post revenue and volume is obtained from the large automated office segment of the population. The residual nonautomated office activity is the contribution of the non-automated office segment to the total permit imprint Parcel Post revenue and volume.

UPS/USPS-T5-38. Do you intend to sponsor as part of your testimony library references USPS-LR-I-25, 26, 28, 30, 229, 230, and 44-48?

RESPONSE. I intend to sponsor library references USPS-LR-I-25, 26, 28, 229

and 230.

UPS/USPS-TS-39. Refer to the entries for Parcel Post in Tables 1 and 2 of the Attachment to UPS/USPS-T5-2 Response. Why are there no entries under the "Lower 95% Confidence Limit" and the "Upper 95% Confidence Limit" columns?

RESPONSE.

The estimated confidence interval limits for the point estimates of total Parcel Post revenue and volume are provided in Tables 1 and 2, respectively, of my testimony and the DRPW witness' USPS-T-4 testimony. The respective estimates of the CV's are under one percent. In the response to UPS/USPS-T5-2, two of the three estimated limits for the estimates of revenue, volume and weight totals are inadvertently omitted from the spreadsheet computation; however, the estimated CV's are provided for all three variables. Using the point estimate and the CV estimate shown in the table, one might easily arrive at estimated 95% confidence intervals of {608,752, 631,110} and {230,472, 239,312} for the revenue and volume estimates (000), respectively.

UPS/USPS-T5-40. Refer to your response to UPS/USPS-T5-7(a).

- (a) Why was there "no non-automated office sample" for permit imprint Parcel Post?
- (b) Was there a non-automated office sample for Parcel Post other than permit imprint Parcel Post? If so, provide the results of that sample.
- (c) Provide the "recently conducted survey of post offices" to which you refer.

RESPONSE.

- a. The findings from a census of permit imprint Parcel Post activity conducted in the PQ2, FY 1997, period immediately prior to the Base Year 1998 period, indicated that due to the extremely high automated office coverage of approximately 99 percent for this mail category, a supplemental panel would be not be an inefficient use of resources in place of the ratio of total revenue to automated office revenue that was used for the FY 1998 period. Moreover, parallel plans were initiated to implement a national trial balance control account to obviate the need for periodic survey updates.
- b. No.
- A partial objection to this interrogatory has been filed. The findings from this survey are provided on page 5 in Appendix A of USPS-LR-I-230/R2000-1.

UPS/USPS-T5-41. Refer to your answer to UPS/USPS-T5-8 and to PS Form 3605-R as in use in FY 1998 (see Library Reference USPS-LR-1-26, Appendix A).

- (a) Confirm that PS Form 3605 as used in FY 1998 did not request the mailer to enter weight information by zone in Section B (Parcel Post) and in Section C (Destination BMC).
- (b) Did the Postal Service obtain weight by zone in FY 1998 some other way in the case of a Parcel Post shipment reported on PS Form 3605, whether for BMC Parcel Post, inter-BMC Parcel Post, or intra-BMC Parcel Post? If so, indicate how that information was obtained. If not, why not?
- (c) How is the "weight per piece" ratio referred to in your answer to UPS/USPS-T5-8(b) obtained?
- (d) How are "the expected zone based rates" referred to in your answer determined?

RESPONSE.

- a. My understanding is that weight information is not recorded by zone nor is this information required. Zone weight is determined by the product of the zone volume and the single-piece weight found on the front side of the postage statement.
- b. See my response to part (a).
- c. The weight per piece ratio is obtained by dividing the reported weight by the reported volume.
- d. The zone-based rates are found in the *Ratefold* provided in the Domestic Mail Manual for the October 6, 1996, and October 5, 1997, periods.

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- UPS/USPS-T5-42. Refer to your answer to UPS/USPS-T5-19(a)-(b), which states that "All revenue, volume and weight fields are checked against the appropriate minimum and maximum values."
- (a) Provide the "minimum and maximum values" to which you refer for every parameter that is checked for "appropriate minimum and maximum values" in the case of Parcel Post.
- (b) How were each of these "appropriate minimum and maximum values" determined for Parcel Post?

RESPONSE.

- a. This information is provided USPS-LR-I-194/R2000-1 in the files labeled BRPW63-64.TXT. The minimum and maximum revenue per piece and weight per piece values are found in the RATEHI, RATELO, WPPMIN and WPPMAX variables shown in the RATESSB input file format statement provided in the Job-2 code of Appendix A of USPS-LR-I-25/R2000-1.
- b. The limits are determined from the general mail class restrictions on weight found in the DMM and from the range of rates for each zone and rate category as determined from the *Ratefold* provided in the Domestic Mail Manual for the October 6, 1996, and October 5, 1997, periods.

UPS/USPS-T5-43. Refer to your answer to UPS/USPS-T5-21, where you state that "... data validation studies are periodically undertaken to verify alignment of the data fields and source documents." Provide copies of all such studies that were undertaken during or with respect to FY1998.

RESPONSE. During the FY 1997-98 timeframe, a data validation study of the PERMIT System reported information was conducted by an independent accounting firm for the then recent PQ2, FY 1997, period. The study methodology involved (1) selecting samples of PERMIT System records and then verifying the reported information against the source postage statement information, and (2) selecting a sample of bulk mail facilities and then verifying the proper reporting of the postage statement information in the PERMIT System. The study uncovered no instances of error in the capturing and reporting of the PERMIT System postage statement revenue and volume information used in the BRPW. Moreover, it reviewed a relatively larger proportion of Parcel Post volume than that of other subclasses and subcategories. A copy of the study report is provided in USPS-LR-I-279/R2000-1.

UPS/USPS-T5-44. Confirm that each record in the BRPW system data base you used represents an individual shipment made by one mailer at one post office on one day. If you do not confirm, explain why.

RESPONSE. Not confirmed. See my response to UPS/USPS-T5-35.

UPS/USPS-T5-45. Is there some way of identifying whether a raw record was verified for accuracy against the postage statements pertaining to that record other than the verification checks that are performed in Jobs I-3?

- (a) If so, explain in detail which variable(s) are used to identify such a record and identify the values that the record would have if it was verified.
- (b) If not, explain in detail why not.

RESPONSE.

(a-b) See the response to UPS/USPS-T5-21. I am not aware of how any such

raw records might be identified; however, a data validation study of the

PERMIT System such as that provided in USPS-LR-I-279/R2000-1 was

undertaken to assess the accuracy of the system's reported information

against the postage statement source information.

UPS/USPS-T5-46. The output for Parcel Post showed 17 observations that had negative values for P and RP.

(a) Explain why these records have negative values.

(b) Are these the only Parcel Post records that have negative values?

(c) If not, identify other Parcel Post records that have negative values and state why they were not included in Job 3 output.

RESPONSE.

a. The PERMIT System is an accounting system additional to a data

reporting system, and as such, it requires that data entry errors related to

postage and trust fund account activity be corrected. It is my

understanding that the negative value records represent reversals of

mailing transactions made during the year. The postage and volume

totals for these records are \$66,322 and 16,441 pieces.

b-c. Yes.

UPS/USPS-T5-47. Confirm whether only eflagged observations are removed from the final estimates of R, P, and W. This question pertains to how the raw data entered in Job 1 is pared down in Jobs I, 2, and 3 to provide final estimates of R, P, and W as final outputs of Job 3. If you do not confirm, explain in detail why you do not confirm and provide a complete list of other ways in which observations are removed from the final estimate.

RESPONSE. Confirmed.

UPS/USPS-T5-48. What are the FI and F2 variables used for?

- (a) Provide definitions for each variable and provide a list of all possible values these variables could have for Parcel Post records.
- (b) If each variable could have more than one value, provide an explanation for why the value would change.

RESPONSE. The F1 variable is an office level multiplier that is used to adjust an office's reported data for one or more missing AP's. The value of this factor is normally unity and is calculated as m/m', where m is the number of AP's in the postal quarter period, and m' is the number of actual AP's reported by the office for the period. The possible variable values are provided in my response to UPS/USPS-T5(a). The F2 variable is a stratum level non-response correction used for the non-automated office segment, and as such does not deviate from

unity for the permit imprint Parcel Post mail category.

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UPS/USPS-T5-49. Define the following variable labels and provide a list of all possible values these variables could have for Parcel Post records. If each variable could have more than one value, provide a detailed explanation for why the value would change.

- (a) Class
- (b) SYS
- (c) APK
- (d) Rdatek
- (e) Eflagk
- (9) Discount
- (g) AP
- (h) PQ
- (I) FY
- (j) Rdate
- (k) FINNO
- (I) VIP
- (m) VIP1
- (n) VIP2
- (o) VIP3
- (p) RPWCode
- (q) RP
- (r) RW
- (s) P
- (t) C
- (u) W
- (u) vv
- (v) NRESP
- (w) Migrate
- (x) Eflag
- (y) Stratum
- (z) Blowup
- (aa) AIC
- (bb) Pdisc

RESPONSE.

a. The CLASS variable distinguishes the mail class. The value is 4C for

Parcel Post records.

- b. The SYS variable distinguishes the indicia and mail class panel type. The value is PI-SB for Parcel Post records.
- c. The APK variable counts the number of AP's in the PQ. The values are 14 for Parcel Post records.
- d-e. These variables are unknown and are not needed or used in the BRPW.
- f. The DISCOUNT variable indicates if a postage discount applies to a rate category. The value is N for Parcel Post records indicating no discount.
- g-h. The AP and PQ variables designate the accounting period and postal quarter, respectively. These values are provided on page 1 of Appendix A of USPS-LR-I-194/R2000-1.
- I. The FY variable is the fiscal year. The value is 98 for Parcel Post records.
- j. The RDATE variable designates the rate period (see my response to UPS/USPS-T5-41(d)). The values are 100696 and 100597 for Parcel Post records.
- k. The FINNO variable is the finance number of the reporting office. The coded values are integers in the range 590001-599999 for Parcel Post records.
- I-o. The VIP variable identifies the VIP Code used to track a rate category. The values for Parcel Post records are provided in USPS-LR-I-194/R2000-1 in fields 8-12 of the files labeled BRPW63-64.TXT. The

VIP1, VIP2 and VIP3 variables correspond to the first, second and third positions of this variable, respectively.

- p. The RPWCODE variable identifies the rate category used in the RPW
 System model. The values for Parcel Post records are provided in USPS LR-I-194/R2000-1 in the files labeled BRPW63-64.TXT in fields 14-18.
- q-r. The RP and RW variables are the uninflated piece-rate and pound-rate revenues, respectively. The RP values are any dollar amount to the nearest cent and the RW value is zero for Parcel Post records.
- s-u. The P, C and W variables contain the uninflated pieces, copies
 (Periodicals), and weight values for a record. The C and P variable
 values are integers and the W variable value is provided to two decimal
 places for Parcel Post records.
- v. The NRESP variable indicates a non-respondent office for a processing run period. The value is 0 for Parcel Post records.
- w. The MIGRATE variable indicates whether a non-automated office
 becomes automated under the PERMIT System. The value is 0 for Parcel
 Post records.
- x. The EFLAG variable provides the edit status for a record. The values are provided on page 4 of USPS-LR-I-25/R2000-1 for Parcel Post records.
- y. The STRATUM variable identifies the sampling stratum for an office. The value is 1 for Parcel Post records.

- z. See page 1 of USPS-LR-I-230/R2000-1. The value is 1 for Parcel Post records in the BRPW jobstream.
- aa. See page 2 of USPS-T-5 at lines 19-22. The value of 999 is used for Parcel Post records for the FY 1998 period.
- bb. The PDISC variable is used for Periodicals records to track discounted volume. The value is 0 for Parcel Post records.

UPS/USPS-TB-50. What happens to the non-numeric VIP records in Jobs I-3?

- (a) Explain in detail what these records represent and how they are different from the non-numeric records.
- (b) Are they eliminated from the final estimates of R, P, and W? If not, explain in detail. If so, explain in detail why they are eliminated.
- (c) Are any Parcel Post records assigned non-numeric VIPs?
- (d) If so, are they included in the final estimates of R, P, and W? Explain why, or why not.

RESPONSE. Non-numeric VIP Code records are identified and dropped from

the BRPW jobstream in Job 1.

- a. The non-numeric VIP Code records by definition do not differ from themselves.
- b. See my response to the body of this interrogatory. These VIP Codes are not used in the BRPW. It is my understanding that they represent

business reply mail.

c-d. No. See my response to part (b).

UPS/USPS-T5-51. Page 19 of Job 2 refers to single and multiple VIPs.

- (a) Explain in detail what this section of the code is used for in the program, and explain how Parcel Post observations are affected by it.
- (b) Explain why a record would have multiple VIP codes.
- (c) Can any Parcel Post records have Multiple VIPs? If so, do any have multiple VIPs?
- (d) When a record has multiple VIPs, which VIP is ultimately used to assign a record to the correct class? Explain in detail the logic for choosing one over the other.

RESPONSE.

a-d. To answer this response it is necessary to assume that the Job 2 page 19

reference pertains to the code shown on page A9 in Appendix A of USPS-

LR-I-25/R2000-1. The multiple VIP term is used to denote VIP Code

pairs, wherein one VIP Code contains the piece-rate postage and volume

information and the other contains the pound-rate postage and weight

information for the rate category. These VIP Codes correspond to rate

categories having both a piece rate and a pound rate component. The

referenced section of the code maps both VIP Codes to a temporary

variable called MVIP that contains the VIP Code ending in the value 6, 7

or 9. These paired VIP Codes do not apply to Parcel Post records.

UPS/USPS-T5-52. Page 27 of Job 2 refers to collecting 0 volume VIPs.

- (a) Explain in detail what this section of the code is used for in the program, and explain how Parcel Post observations are affected by it.
- (b) Why would a record have zero volume?
- (c) What is the source of a zero volume VIP record?
- (d) Can any of the Parcel Post records be designated as zero volume VIPs? If so, are any so designated?
- (e) Are zero volume VIP records eliminated from the final estimate of R, P, and W output from Job 3?
- (f) Are zero volume VIP records part of the raw record inputs into Job I, or is the volume zeroed out somewhere in Jobs I-3? Explain in detail.
- (g) If these records are zeroed out in Jobs 1, 2, or 3, explain in detail why they are zeroed out.
- (h) If Parcel Post records are zeroed out in Jobs 1, 2. or 3, explain why these records are zeroed out.
- (i) If Parcel Post records are zeroed out in Jobs, I, 2. or 3, and they are done so for different reasons than in the case of other mail classes, explain in detail why they are zeroed out for Parcel Post for reasons different than in the case of other mail classes.

RESPONSE. To answer this response it is necessary to assume that the Job 2

page 27 reference pertains to the code shown on page A27 in Appendix A of

USPS-LR-I-25/R2000-1.

a-c. This section collects all unused VIP Code categories found on the rate

files identified earlier in the Job 2 program code, and for each unused

category a placeholder VIP Code with zero revenue and volume is

created. An unused VIP Code category is one where no matching panel

activity is reported during the processing period. A Parcel Post

observation by definition has non-zero revenue and volume entries. As

such, a Parcel Post record is not a zero volume VIP and is unaffected by

this code.

- Yes. This can be determined from the files labeled BRPW48-51.TXT, provided in USPS-LR-I-194/R2000-1, upon selecting records with SYS variable value PI-SB that also have the value zero for each of the RP, RW, P and W variables.
- e. No.
- f-i. See my response to parts (a-c) of this interrogatory.

UPS/USPS-T5-53. Page 5 of Job 3 has a statement that says the following: "Remove following after old rates obsolete." Explain this statement in detail. (a) What is this code used for in Job 3?

- (b) Why is it used?
- (c) How are Parcel Post records affected by this section of the code? Explain in detail.

RESPONSE. The Job 3 programming code provided in Appendix A of USPS-

LR-I-25/R2000-1 is shown on pages numbered A29 to A36. The referenced line

of code which is found on page A31 applies to the RDATE value 010195 which

precedes the RDATE values used for the Base Year 1998 period. The code is

no longer used and no records are affected by it.

UPS/USPS-T5-54. For Parcel Post records, if there is an empty or unexpected R, P, W, RPP, or RLB for a given observation, are the values imputed, or are the records eliminated from the final estimates? If neither, explain.

- (a) Confirm that imputation is only done in the code itself (i.e., none of the raw records input into Jobs 1, 2, or 3 are imputed before entering any job).
- (b) If you cannot confirm, indicate which Parcel Post records are imputed outside of the program (i.e., changes made to the raw record value(s), and then input into Jobs 1,2, or 3 as opposed to having the code change the record).
- (c) Provide a complete list of all reasons why a record value would be imputed as opposed to removed from the final Job 3 output estimates.
- (d) How does this list differ between Parcel Post on the one hand and all other mail classes on the other hand?

RESPONSE. Parcel Post records found to have missing or unexpected values

are bypassed in Job 2 from downstream processing. No Parcel Post data are

imputed in the BRPW. My understanding is that no imputation occurs outside

the BRPW jobstream.

a-c. See my response above.

d. The BRPW Job 2 code imputes the weight for a postage affixed Standard

Mail (A) category record if the value of the weight variable is zero.

UPS/USPS-T5-55. Confirm that Eflag=2100 is used in the BRPW system to identify unexpected R. P, or W values in each record. If you cannot confirm, explain in detail why you cannot confirm.

- (a) Define what "unexpected" means in the context that it is used in Jobs I, 2, and 3.
- -(b) Provide all documents and analyses used to develop the criteria for Eflag=2100 used in Jobs 1,2, or 3.
- (c) Does Eflag=2100 process Parcel Post records any differently than any other mail class? If so, explain in detail.

RESPONSE. Not confirmed. The EFLAG variable value of 2100 applies only to

the Periodicals mail category or to paired VIP Code categories.

a. An unexpected value is a non-zero weight value for a piece-rate only

record or a non-zero piece value for a pound-rate only record.

b. No documents or analyses are used. An EFLAG value of 2100 is

determined internally within the Job 2 code by default for Periodicals

records and multiple VIP Code record pairs.

 c. This question is unclear. The EFLAG variable does not process Parcel Post records. Records with the ELAG variable value of 2100 are all processed similarly.

UPS/USPS-T5-56. If a record does not meet the tolerance level for revenue per piece or weight per piece, is it removed from the final estimate? If not, explain all possible changes that are made to the record, so that it passes the tolerance level effag test.

- (a) Provide copies of all analyses and supporting documentation used in developing these tolerance levels in hard copy and electronic format with original formulas intact.
- (b) Explain how the tolerance levels were derived.
- (c) What happens to Parcel Post records that are eflagged for tolerance violations?
- (d) Are they part of the population of final R, P, and W estimates output in Job 3? If not, explain in detail why not. If some records are and others are not, explain in detail how the two types are handled in the BRPW process.
- (e) If some records are and others are not, explain in detail what criteria is used for keeping one in the BRPW system versus not keeping another.
- (f) If some sort of formal, documented analysis is performed on each record to determine whether it stays in the process or not, provide copies of all such analyses, along with supporting documentation for how each analysis was developed, in hard copy and in electronic format with original formulas intact.
- (g) If no formal, documented analysis is performed on each record, explain why it is not performed.
- (h) If subjective judgement is used instead of some formal, documented analysis, explain why a subjective method was chosen over a formal method.
- (i) If subjective judgement is used, explain in detail how this process works to arrive at a decision for what tolerance level to use.

RESPONSE. Yes.

a-i. The computed revenue per piece and weight per piece measures are not

necessary to the computation of the absolute postage and weight values

required in the BRPW. The relative measures are instead developed

internally within the Job 2 code and are integral along with the numerous

other data verifications, including job aborts, used in the BRPW in

protecting the estimates from unexpected or extreme out of bound values

which might result from error due to an incorrect VIP Code category

revenue, volume or weight boundary check, or to inadvertent error in an input data record itself which otherwise might have passed a less restrictive absolute measure verification check upstream in the program. A record that fails either of the two checks is bypassed from downstream processing and is not output from the Job 3 program. No analyses or documents are available pertaining to the tolerance level of five percent used for the FY 1998 period. The tolerance level is a global value and is applied to all mail categories. The level is derived in part out of practical considerations; in general, too small a threshold will flag records unnecessarily, while one that is too large risks passing large errors and introducing a potential bias into the estimates. In the BRPW, the absolute value of the relative difference of the actual and expected values is compared to the tolerance level. As a result, and because each record is subject to the same tolerance check, the accuracy of the estimates is not likely affected by the choice of a threshold in the neighborhood of that selected since flagged differences would theoretically cancel on average.

- UPS/USPS-T5-57. Can you confirm that all records labeled with SYS=PI-SB and Class=SB are strictly Parcel Post records? If not, explain why you cannot confirm and explain in detail what other variables are required to determine Parcel Post records.
- (a) Do these transactions only represent transactions provided with PS Form 3605? If not, what other PS Forms are represented by these records, and how can records be identified as having come from sources other than PS Form 3605?
- (b) Priority Mail is also reported on 3605. How does the program keep Priority Mail separated from Parcel Post? If some variable other than VIP is used, provide a list of which ones and explain in detail what values are associated with each variable to identify each Parcel Post record.

RESPONSE. The SYS PI-SB value alone identifies the permit imprint indicia

Parcel Post records.

- a. See my response to UPS/USPS-T5-31.
- b. The Priority Mail and Parcel Post records are identified by unique VIP

codes. The input data records are mapped in Job 1 by these VIP Codes

to the appropriate SYS and CLASS variable values which distinguish the subclasses.

DECLARATION

I, Herbert B. Hunter III, hereby declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information and belief.

Herbert B. Hunter III

Date: _______ 1 5, 200