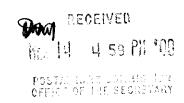
### BEFORE THE POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001



POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000-1

### RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE TO INTERROGATORIES OF UNITED PARCEL SERVICE (UPS/USPS-T2-15-17, 19)

The United States Postal Service hereby provides the responses of witness Ramage to the following interrogatories of United Parcel Service:

UPS/USPS-T2-15-17, 19, filed on February 29, 2000. Interrogatory UPS/USPS-T2-18 was redirected to the Postal Service.

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

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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.

Kenneth N. Hollies

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 (202) 268–3083 Fax –5402 February 29, 2000

ANM/USPS-T2-15. During Base Year 1998, what was the Postal Service's total expenditure on the IOCS? Please break down the total into IOCS tally clerks, training, computer processing, etc.

### **RESPONSE:**

The Postal Service's expenditure for salaries and benefits for IOCS field data collection, training, and supervision is estimated to be approximately 15 million dollars for FY 1998.

ANM/USPS-T2-16. Witness Kingsley, USPS-T-10, describes future plans to mechanize and automate mail handling further, including automation of flats processing, possible DPS-ing of flats, tray management systems, robotics, mail cartridge systems for DBCSs, etc.

- (a) Please confirm that prior automation has been accompanied by a decrease in the percentage of direct IOCS tallies and an increase in the number of mixed mail and not handling tallies. If you fail to confirm without qualification, please explain fully your answer, and produce or provide page citations to all data on which you reply.
- (b) Is there any reason to doubt that the percentage of direct tallies will diminish further with continued increases in mechanization and automation? Please explain any answer that is not an unqualified negative.
- (c) Please confirm that a continued diminution of direct IOCS tallies is likely to lead to further increases in the range of the coefficient of variation at the 95% confidence level, a further diminution in the reliability of IOCS cost estimates, and increasing year-to- year variability in mail processing cost estimates. Please explain any answer that is not an unqualified confirmation.

#### **RESPONSE:**

(a)-(c) I did not study this, but see my responses to ANM/USPS-T2-1(a) and to ANM/USPS-T2-9, parts (c) and (e). The purpose of my testimony is to describe the In-Office Cost System for Base Year 1998 and to present measures of reliability of major cost estimates for that time period. This does not extend to determining or speculating on issues of cost causality.

ANM/USPS-T2-17. What is the role of the IOCS in a "lights-out" facility (such as the Postal Service's experimental facility in Ft. Myers, Florida is reported to be) where most of the labor is involved in loading and off-loading trucks, moving empty equipment, removing occasional machine jams, maintenance and repairs, etc.?

#### **RESPONSE:**

The Ft. Myers facility is included in the IOCS sample, and the role of IOCS in that facility is much like the role IOCS plays in other facilities. Although the Ft. Myers P&DC is referred to as a "lights-out" facility, it is my understanding that it has not yet reached the level of automation implied in this question. The activities referred to in this interrogatory correspond to those measured in IOCS questions 18 and 19. A tabulation of BY 1998 IOCS question 18 data shows that only about 12.2 percent of the observations are working on the "Platform" while about 64.5 percent were working in "Distribution and Related Mail Processing". Also, a tabulation of the activity codes for clerk and mailhandlers shows that only 7.1 percent of the observations were handling empty equipment while 61.2 percent of the observations were handling direct mail.

Q18	Frequency	Percent	Cumulative t Frequency	
1. Platform	48	12.2	48	12.2
<ol><li>Collect&amp;prep</li></ol>	22	5.6	70	17.9
3. Mailproc&dist	253	64.5	323	82.4
4. Misc operation	1 8	2.0	331	84.4
6. Admin/other	61	15.6	392	100.0
ACT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
direct mail	240	61.2	240	61.2
empty equip	28	7,1	268	68.4
mixed mail	59	15.1	327	83.4
other	65	16.6	392	100.0

ANM/USPS-T2-18. During the years FY 1998-2001, how much has the Postal Service programmed to spend on research and development for new systems to track and develop mail processing costs in the approaching automation environment?

### **RESPONSE:**

This interrogatory has been redirected to the Postal Service.

ANM/USPS-T2-19. This question refers to attachment ANMIUSPS-T2-19, which is hereby incorporated as part of the question. The mail processing cost and volume data in the attachment are from LR-I-96. The percentages in the bottom portion are computed from the data in the top part.

- (a) Please confirm that the mail processing cost and volume data in the top portion have been correctly transcribed. If you do not confirm, provide the correct data.
- (b) Please confirm that, for shape, presort condition and weight, the three Commercial ECR letter categories shown here (Basic, Auto and High Density/Saturation combined) constitute reasonably homogeneous subcategories vis-a-vis their respective Nonprofit ECR letter counterparts? If you do not confirm, please provide and discuss all significant cost-causing differences.
- (c) The bottom portion of the table in the attachment indicates that, for Auto ECR letters, the Nonprofit Test Year volume (439 million) amounts to 17.4 percent of the Commercial volume (2,528 million), while nonprofit dollar-weighted IOCS tallies in Test Year amount to 17.9 percent of commercial. Please confirm that the similarity of the two percentages is unsurprising in light of the homogeneity of the mail. Please explain fully any failure to confirm.
- (d) The bottom portion of the table also shows that in Test Year Basic Nonprofit ECR, letters Nonprofit receive 28.9 percent of the dollar-weighted amount attributed to Commercial ECR letters, yet the volume of Nonprofit ECR Basic letters (888 million) amounts to only 12.3 percent of the volume of Commercial ECR Basic letters (7,212 million). If Nonprofit and Commercial ECR Basic letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR Basic letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective rate category? What is the coefficient of variation (CV) for the mail processing cost estimate for Nonprofit Basic ECR letters?
- (e) For all ECR non-letters combined, Nonprofit volume (934 million) amounts to 4.6 percent of Commercial volume (20,502 million) while Nonprofit mail processing cost (based on dollar-weighted IOCS tallies) amounts to 12.0 percent of Commercial. If Nonprofit and ECR non-letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR non-letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective category? What is the coefficient of variation for the mail processing cost estimate for (i) Nonprofit Basic non-letters, (ii) Nonprofit High Density/Saturation non-letters, and (iii) all Nonprofit non-letters combined?
- (f) For all ECR combined, Nonprofit volume (2.9 million) amounts to 8.6 percent of Commercial volume (33.6 billion), while dollar-weighted Nonprofit mail processing cost (based on IOCS tallies) amounts to 17.3 percent of Commercial. If Nonprofit ECR mail has an equal chance of being sampled each time an IOCS tally happens to be taken from ECR mail, what is the probability of drawing a sample what is so disproportionate to the volumes of each respective category?

- What is the coefficient of variation for the mail processing cost estimate for all Nonprofit ECR mail?
- (g) The table in the attachment relies solely on dollar-weighted IOCS tallies. For each mail processing cost estimate shown in the top portion of the table, please provide the number of direct tallies that underlie and form the basis for the dollar-weighted cost estimate. If the raw tallies are not distributed in proportion to the dollar-weighted cost estimates, please explain (i) which operations and their associated tallies have a higher-than-average cost, and (ii) why were nonprofit tallies disproportionately distributed among the operations with higher-than-average cost.
- (h) As pointed out in the preceding part (f), the volume of all Nonprofit ECR (2.9 million) amounts to only 8.6 percent of Commercial volume (33.6 billion). On a percentage basis, the volume of Nonprofit ECR might reasonably be described as "small," if small is defined as anything less than 10 percent. From a statistical viewpoint, does 2.9 million pieces constitute a relatively small volume for obtaining reasonably accurate mail processing cost estimates that are not likely to offer much variation owing to random differences in the sample?
- (i) How large do the volume and the sample have to be before one can expect relatively little variation in the cost estimate owing to random variation?

#### **RESPONSE:**

Parts (a), (b), and (g) have been redirected to witness Daniel.

(c)-(f) I did not produce any test year costs, nor produce CVs for test year cost estimates. Evaluation of test year methodologies is beyond the scope of my testimony. Please see my response to ANM/USPS-T2-16. However base year subclass level CVs are provided for mail processing costs in Table 1 of my testimony. Coefficients of variation for cost estimates of other categories of mail can be approximated using the generalized variance function as outlined in my response to ANM/USPS-T2-13. Since IOCS samples employee in-office time and not mail volume, I have not studied mailpiece selection probabilities.

- (h) See my respone to parts (c)-(f), above. The IOCS does not sample mail volumes. It is possible for two products to have similar volumes, yet dissimilar mail processing costs and consequently dissimilar CVs for those mailprocessing costs.

  Measures of sampling error for mail processing cost estimates are reported in Table 1 of my testimony for the BY 1998 cost estimates. The CV for Nonprofit ECR mailprocessing costs is about 7.22 percent.
- (i) See my responses to part (h) of this interrogatory, above, and to ANM/USPS-T2-11. The magnitude of costs (not volumes) for an activity drives the CVs in IOCS.

### **DECLARATION**

I, Mark F. Ramage, hereby declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information and belief.

Mark F. Ramage

Date: March 14, 2000