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 DEGEN TO INTERROGATORIES OF MAGAZINE PUBLISHERS OF AMERICA (MPA/USPS–T16–1-2)

The United States Postal Service hereby provides the responses of witness Degen to the following interrogatories of Magazine Publishers of America: MPA/USPS–T16-1-2, filed on February 15, 2000.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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March 14, 2000

Interrogatories of Magazine Publishers of America
to United States Postal Service Witness Degen

MPA/USPS-T16-1. Please refer to Docket No. R97-1, Opinion and Recommended Decision, at pages 141-142, paragraphs 3178-3179, where it states:

> [T]he Commission concludes that mixed mail costs in a given allied MODS pool should be distributed in proportion to the direct costs across all MODS pools, and that not handling costs in a given allied pool should be distributed on the combination of its direct costs and its redistributed mixed mail costs. It does so on the understanding that this is an interim solution to the lack of data on the true subclass distribution of mixed mail and not handling costs. The Commission agrees with witness Shew that the assumption that uncounted mixed mail costs have the same subclass distribution as direct mail costs is one that could be tested, if not systemwide, at least by spot sampling (Tr. 28/15527-28.) It would appear that an approach similar to the one that the Postal Inspection Service used to audit MODS data could be used to audit IOCS distribution keys. Under that approach, a small number of offices could be selected for an audit and an adequate audit team provided to count all eligible mixed mail items at the selected facility. The Postal Service should also consider collecting information that identifies the presence of mail of particular shapes and subclasses in containers, even if it is not counted. It is also clear that better models of cost responsibility for allied operations are urgently needed.

Please also refer to page 65 of your testimony, where you state "The platform study produced a relatively small sample from which to draw inferences," and to Table 8 on page 66 of your testimony.

(a) Please confirm that the 1995 Platform Study is the only data collection that the Postal Service has performed on the subclass composition of mixed-mail costs at allied operations. If not confirmed, please describe all other studies and provide copies of the reports resulting from these studies.

(b) How many containers comprise your "small sample from which to draw inferences"?

(c) Please provide coefficients of variation around the class percentages for the FY95 Platform Study Distribution column of Table 8.

(d) Please provide coefficients of variation around the subclass percentages underlying the class percentages for the FY95 Platform Study Distribution column of Table 8.

(e) Do you believe that the 8.8 percent difference in the "Priority+Express" row between the IOCS column and the Platform Study column is because "Priority+Express" mail is more likely to be in mixed containers than in

direct tallies or is simply due to sampling error in the platform study? Please explain your answer in detail. (i) If the former, please explain operationally why this would occur. (ii) If the latter, why do you believe the platform study is reliable for other classes if it is unreliable for "Priority+Express" mail?

(f) Do you believe that the 7.4 percent difference in the "Standard (A)" row between the IOCS column and the Platform Study column is because "Standard (A)" mail is more likely to be in direct tallies than in mixed containers or is simply due to sampling error in the platform study? Please explain your answer in detail. (i) If the former, please explain operationally why this would occur. (ii) If the latter, why do you believe the platform study is reliable for other classes if it is unreliable for "Standard (A)" mail?

MPA/USPS–T16–1 Response.

(a) Other than the 1995 Christensen Associates study referenced, I am unaware of any studies of the subclass composition of mixed-mail tallies in Allied operations.

(b) The number of containers sampled in the 1995 Platform Study is 719.

(c) Obtaining coefficients of variation about the referenced elements of the column in Table 8 involves a non-trivial bootstrapping analysis. I have begun this analysis, and will file the results as soon as they are available.

(d) See answer to MPA/USPS-T16-1 (c).

(e) Please note what is being compared in the question. The "FY95 IOCS Platform Dist. Key" is based substantially on tallies of "identified" containers: non-identical container tallies in which the IOCS data collector has estimated the percentage of the container's cube taken up by items and loose pieces by type. The dollar weight of each such tally is divided among the item types and loose shapes it contains using the estimated percentages as weights,

and the subclass distribution of each type of item or loose shape observed in the container is then inferred from the subclass distribution of the corresponding direct tallies of the same type. The "FY95 Platform Study Distribution," on the other hand, is based on actual counts of mail in the sampled items found in the sampled container. See LR-I-115 at page 4.

It would be more accurate to describe the difference cited in the question as a difference of 8.8 *percentage points,* rather than as an 8.8 percent difference. The percent difference between the "FY95 IOCS Platform Dist. Key" entry for Priority+Express and the corresponding entry from the "FY95 Platform Study Distribution" column is not 8.8 percent, and differs depending on which entry is used as the denominator in the computation. Also, please note that the "FY95 Platform Study Distribution" entries in Table 8 are based on tallies for items found inside of *all* containers on the platform – both identical and non-identical containers. When the proportions for the "FY 95 Platform Study Distribution" are recalculated using only tallies of non-identical containers, the share of "Priority+Express" is 6.0 percent, which corresponds to a difference of 3.4 percentage points from the corresponding "FY 95 IOCS Platform Dist. Key" entry. See also my response to DMA/USPS-T16-3 (a).

In the absence of information on their respective standard errors, it would be inadvisable to view an 8.8 percentage point difference (or a 3.4 percentage

point difference) between the "Priority+Express" proportions in the two referenced columns as evidence that "'Priority+Express' mail is more likely to be in mixed containers than in direct tallies." Without knowledge of the standard errors, one cannot make any statistically meaningful statement about whether the two proportions differ and, if they do, how big that difference might be.

(f) Again, please note what is being compared in the question. To reiterate what was said in the answer to part (e) above, the IOCS Platform distribution key is based substantially on tallies of identified containers. The dollar weights of such tallies are divided among the item types and/or loose shapes observed within them, and the subclass distribution of each item type or loose shape is inferred from the subclass distribution of the corresponding direct tallies of the same type. The distribution derived from the Platform Study, on the other hand, is based on actual counts of mail observed in items found inside the sampled containers. See LR-I-115 at page 4.

It would be more accurate to describe the difference cited in the question as a difference of 7.4 *percentage points,* rather than as a 7.4 percent difference. The percent difference between the "FY 95 IOCS Platform Distribution Key" entry for Standard (A) and the corresponding entry from the "FY 95 Platform Study" column is not 7.4 percent, and differs depending on which entry is used as the denominator in the computation. Also, please note that the

"FY95 Platform Study Distribution" entries in Table 8 are based on tallies for items found inside of *all* sampled containers on the platform – both identical and non-identical containers. When the proportions for the "FY95 Platform Study Distribution" are recalculated using only tallies of non-identical containers, the share of "Standard (A)" is 29.1 percent, which corresponds to a difference of 3.6 percentage points from the corresponding "FY95 IOCS Platform Dist. Key" entry. See also my to DMA/USPS-T16-3 (a).

In the absence of information on their respective standard errors, it would be inadvisable to view a 7.4 percentage point difference (or a 3.6 percentage point difference) between the "Standard (A)" proportions in the two referenced columns as evidence that "'Standard (A)' mail is more likely to be in direct tallies than in mixed containers." Without knowledge of the standard errors, one cannot make any statistically meaningful statement about whether the two proportions differ and, if they do, how big that difference might be.

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MPA/USPS-T16-2. Please refer to Docket No. R97-1, Opinion and Recommended Decision, at page 140, paragraph 3174, where it states:

> The risk that witness Degen's distribution keys for allied pools suffer from the biases described above is magnified by the fact that direct costs are a small minority of the total costs in most allied pools. For example, 10 percent of the costs in the platform MODS pool are direct, while 90 percent are mixed and not handling costs. All else being equal, the risk that a 10 percent sample misrepresents the whole is much greater than the risk that a 75 percent sample misrepresents the whole.

(a) Please confirm that in Base Year 1998, less than 10 percent of the costs in the platform MODS pool were direct. If not confirmed, what percentage of platform MODS pool costs were direct?

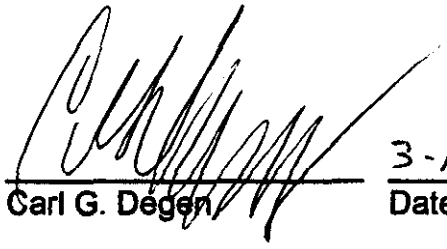
(b) Please confirm that in Base Year 1998 less than 25 percent of the costs in all allied MODS pools were direct. If not confirmed, what percentage of allied MODS pool costs were direct?

MPA/USPS-T16-2 Response.

(a) Confirmed that less than 10 percent of the total dollar weighted tallies in the MODS platform cost pool were direct tallies (i.e., tallies containing subclass information). However, directs made up 25 percent of the total dollar weighted *handling* tallies in this pool in BY 1998.

(b) Confirmed that less than 25 percent of the dollar weighted tallies in all MODS allied cost pools were direct tallies. However, directs made up 50 percent percent of the total dollar weighted *handling* tallies in these pools in BY 1998.

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



Carl G. Degen

3-13-00

Date

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.

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