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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 DEGEN TO INTERROGATORIES OF MAGAZINE PUBLISHERS OF AMERICA (MPA/USPS-T16-3 -11)

The United States Postal Service hereby provides the response of witness

Degen to the following interrogatories of MPA: MPA/USPS—T16-3 -11, filed on March

10, 2000.

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

Eric P. Koetting

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 (202) 268–2992 Fax –5402 March 24, 2000

MPA/USPS-T16-3. Please refer to LR-I-115 from Docket R2000-1, and your response to MPA/USPS-T12-11(c) from Docket No. R97-1, where, in response to the question, "Has the Postal Service performed any quantitative studies to determine whether items in containers are similar to items not in containers (with respect to Class, Subclass, and shape)?," you answered: "I am aware of no such studies."

- (a) Please confirm that the 1995 Platform Study was performed by Christensen Associates for the Postal Service. If not confirmed, please explain. If confirmed, please provide the names of all Christensen Associates employees who were involved in the study.
- (b) Please state whether you were aware of the 1995 platform study when you responded to MPA/USPS-T12-11 (c) in Docket No. R97-1. If so, please explain in detail why you responded that you were "aware of no such studies" in that case.
- (c) Please state when you were made aware of the 1995 platform study.
- (d) Please state what the original purpose was of the 1995 platform study.
- (e) Please state why you did not present the results of this study in Docket No. R97-1 as part of your testimony or in response to the aforementioned interrogatory.
- (f) Please list all studies for which data from the 1995 Platform Study was used, and, for each, please indicate (i) whether any Christensen Associates employees were involved in writing the report, (ii) when report writing began, and (iii) when the report was completed. Please also provide a copy of each report.
- (g) Are you currently aware of any other studies that assess whether items in containers are similar to items not in containers (in terms of class and subclass)? If so, please provide a copy of each.
- (h) Please state whether you are currently aware of any other data with which one could assess whether items in containers are similar to items not in containers (in terms of class and subclass). If so, please provide an electronic copy of the data.
- (i) Please state whether you are currently aware of any other studies that assess whether direct items are similar to mixed items (in terms of class and subclass). If so, please provide a copy of each.

- (j) Please state whether you are currently aware of any other data with which one could assess whether direct items are similar to mixed items (in terms of class and subclass). If so, please provide an electronic copy of the data.
- (k) Please identify when Christensen Associates performed the analysis of the 1995 Platform Study data that you present in your testimony.
- (I) Please state whether the analysis presented in your testimony is the only analysis that Christensen Associates has performed using 1995 Platform Study data?

MPA/USPS-T-16-3 Response.

- (a) Confirmed. The following employees/former employees of Christensen Associates were involved in study: Carl Degen, Kerry Ehlinger, Noelle Chesley, Dan Talmo, Joseph Henningfield, Stacey McCullough, Marianne Ley, Molly Moosebrugger, Margaret Schuster, Mike McGrane, Pam Hermann, Quentin Baird, Tom Ayen, and Patricia Stachowiak.
- (b) When I responded to MPA/USPS-T12-11(c) in Docket No. R97-1, the data collection phase of the 1995 Platform Study was complete, but the findings and reports presented in my testimony and in USPS-LR-I-115 had not been prepared. The question clearly pertained to studies for which there were findings and reports, as indicated by the final sentence, which read, "[P]lease summarize the findings of each study and provide a copy." At the time of my response to MPA/USPS-T12-11(c), I was aware of no such studies.
- (c) I became aware of the findings of the 1995 Platform Study in December 1999 when the tally data were weighted and analyzed.

- (d) The 1995 Platform Study was originally designed to provide a profile of mail pieces in containers and items being handled in platform operations by class and shape of mail. The purpose of the study was to check the iOCS distribution.
- (e) As I indicated in response to part (c), there were no results until December 1999.
- (f) In October 1995 some unweighted data were provided to Nick Acheson.

 Specifically, he was provided destinations for third-class tallies by sack type. No report was generated. No other reports or results were produced prior to those in USPS-LR-I-115.
- (g) I am not aware of any studies other than the 1995 Platform Study that assesses whether items in containers are similar to items not in containers in terms of class and subclass.
- (h) I am not aware of any data, other than from the 1995 Platform Study, that could be used to assess whether items in containers are the same as items not in containers in terms of class and subclass.
- (i) I am not aware of any data, other than from the 1995 Platform Study, that assesses whether direct items are similar to mixed items in terms of class and subclass.
- (j) I am not aware of any data, other than from the 1995 Platform Study, that could be used to assess whether direct items are similar to mixed items in terms of class and subclass.

- (k) The analysis of the 1995 Platform Study data was performed in late 1999.
- (!) Other than that described in my response to part (f), I am not aware of any data or results from the 1995 Platform Study released by Christensen Associates prior to completion of the study in December 1999.

MPA/USPS-T16-4. Please refer to your response to DMA/USPS-T16-3(a).

- (a) Please confirm that the FY95 IOCS Platform Distribution Key was developed using item and loose shape tallies for all allied operations, not just tallies in the platform operation. If not confirmed, please list all cost pools from which direct item and loose shape tallies were used to develop the key.
- (b) Please confirm that witness Van-Ty-Smith's mixed-mail distribution keys for all allied operations other than Platform use only tallies from the same pool (unless there are no tallies to develop the key). If not confirmed, please explain.
- (c) Please provide a revised FY95 IOCS Platform Distribution Key that is developed in the same way as the key provided in your response to DMA/USPS-T16-3(a) except that it only uses tallies from the MODS Platform cost pool.
- (d) Please confirm that mixed-mail costs in the MODS Platform cost pool comprise approximately 42 percent of mixed-mail costs at MODS allied operations. If not confirmed, please state what percent of MODS allied mixed-mail costs are comprised of MODS Platform mixed-mail costs.

MPA/USPS-T-16-4 Response.

The FY95 IOCS Platform Distribution Key was not discussed in the response to DMA/USPS-T16-3(a). I assume the questions refer to the response to DMA/USPS-T16-3(b).

- (a) Confirmed. Please note that this approach is consistent with witness Van-Ty-Smith's procedures for "filling" the "identified" mixed-mail containers.
- (b) Confirmed.
- (c) The requested data are provided in Attachment 1 to this response. Please note that the FY95 IOCS Platform Distribution Key referenced contains the subclass distribution of the dollar-weighted direct item tallies in the allied labor cost pools, which are the tallies used to distribute the dollar-weighted tallies for Items in

identified containers. However, the actual distribution process for identified container tallies does not apply a single distribution key (see Docket No. R97-1, USPS-T-12 at pages 9-10). The implicit subclass distribution key for Platform items in containers weights the direct item tallies (used to form the distribution keys) according to the prorated dollar weights of the items observed in the container tallies (the quantities to be distributed). In the table in Attachment 1 I provide the implicit distribution key for Platform items in containers corresponding to the key given in Table 8, as well as the implicit key using only Platform tallies, as requested.

(d) Assuming that empty item and container tallies are considered part of the set of mixed-mail tallies, I confirm that 42.3 percent of the total dollar-weighted mixed-mail tallies in the MODS Allied cost pools are from the MODS Platform cost pool. If empty item and container tallies are not included part of mixed-mail, the share rises to 47.1 percent.

Attachment 1 Response to MPA/USPS-T16-4(c) Page 1 of 1

	Table 8 "FY95 IOCS	Implicit FY95 IOCS	Implicit FY95 IOCS Distribution Key Using Only MODS
Class	Distribution Key*	Distribution Key	Platform Tallies
First Class	50.59%	55.86	55.05%
Priority+Express	2.63%	9.91	9.51%
Periodicals	11.53%	7.82	6.68%
Standard (A)	32.71%	21.79	22.90%
Standard (B)	1.10%	1.51	2.09%
All Other	1.44%	3.11	3.78%
Total	100.00%	100.00	100.00%

MPA/USPS-Ti6-5. Please refer to your Testimony at page 62, line 5, where you state: "There is no question of selection bias with respect to empty items." Please refer further to your Testimony at page 65, lines 4-8, where you state: "Assumption 4 uses the subclass distribution of direct items not in containers to infer the subclass distribution of items in containers...Once again, this assumption cannot be criticized for selection bias." Also, please refer further to your Testimony at page 66, lines 1-2, where you state: "Assumption 5 involves empty container tallies.... As with empty items, the issue is not selection bias." Finally, please refer to your Testimony at page 60, Table 4. In particular, please refer to the "Relevant Assumption" column.

- (a) Please confirm that direct item tallies form the distribution key for mixed non-empty item tallies, mixed empty item tallies, and the mixed identified container tallies that include items. If not confirmed, please explain.
- (b) Please confirm that identical container tallies and filled mixed identified container tallies form the distribution key for mixed non-identified container tallies and empty container tallies. If not confirmed, please explain.
- (c) Please confirm that the combination of a and b above implies that direct item tallies—by forming the distribution key for mixed identified container tallies that include items—therefore also indirectly form part of the distribution key for mixed non-identified container tallies and empty container tallies.
- (d) Please confirm that if there is selection bias for direct item tallies, it biases not only the distribution of mixed non-empty item tallies, but also the distribution of mixed empty item tallies, mixed identified container tallies that include items, mixed non-identified container tallies, and empty container tallies. If not confirmed, please explain.
- (e) Please confirm that Assumption 4 ("The costs associated with tallies of items in mixed-mail containers have the same subclass distribution as the costs associated with direct item tallies, by item type") is relevant for empty containers because this assumption identifies the subclass profile for non-empty containers, which is used to identify the subclass profile of empty containers. If not confirmed, please explain.
- (f) Please confirm that Assumption 3 ("The costs associated with non-identified container tallies have the same item distribution as the costs associated with identified container tallies of the same container type") is relevant for empty containers because this assumption affects the subclass profile for non-identified,

non-empty containers, which is used to identify the subclass profile of empty containers. If not confirmed, please explain.

- (g) Please confirm that Assumption 1 ("The contents of items tallied as 'mixed-mail' in IOCS have the same subclass distribution as direct item tallies of the same item type") is relevant for all non-identical containers because if "mixed-mail" tallies do not have the same subclass distribution as direct item tallies then the subclass profile of direct item tallies does not accurately represent the subclass profile of items. If not confirmed, please explain.
- (h) Please confirm that if direct item tallies aren't representative of all item tallies, there is no reason to believe that they would be representative of container tallies. If not confirmed, please explain.

MPA/USPS-T-16-5 Response.

- (a) Partly confirmed. It may be broadly correct to say that the distribution keys for mixed and empty item tallies, as well as for the prorated portion of "identified" containers occupied by items, are based upon direct item tallies for the same item type and, where possible, the same cost pool. For the full details of the distribution key formation process, please see USPS-T-17 and USPS-LR-I-107. There is not a single key for distributing all mixed-mail item and identified container tallies, as the question seems to imply.
- (b) Partly confirmed. As with part (a), the statement may be broadly correct as a casual description of the distribution process, but it omits the details that the distribution keys are formed by container type and, where possible, cost pool. For the full details of the distribution key formation process, please see USPS-T-17 and USPS-LR-I-107.
- (c) Partly confirmed, subject to the caveats stated in the response to parts (a) and (b).

- (d) Partly confirmed. Because of the details of the Postal Service's mixed-mail distribution method, the "selection bias" presupposed by the statement would have to bias the subclass distribution keys at the level the tallies are employed. I have testified that I believe no significant selection bias exists for item tallies, mainly because the vast majority of them are subject to the "top piece rule." Further, by using associations between cost pool, shape, item type, and/or container type and the likely subclass contents of mixed-mail observations, the Postal Service's distribution methodology largely avoids this potential source of bias. See USPS-T-16 at pages 59-61.
- (e) Confirmed that Assumption 4 is relevant to empty containers because empty containers are categorized with non-identified non-empty containers for the purposes of witness Van-Ty-Smith's distribution key procedures.
- (f) Confirmed that Assumption 3 is relevant to empty containers because empty containers are categorized with non-identified non-empty containers for the purposes of witness Van-Ty-Smith's distribution key procedures.
- (g) Not confirmed. The assumed relationship between direct item and mixed container tallies is specified in Assumption 4. See also the response to part (e).
- (h) The statement, as written, is practically tautological. Please note that it is *not* my testimony that direct item tallies are, as a general matter, representative of container tallies.

MPA/USPS-TI6-6. Please refer to page 66 of your Testimony at Table 8. and your response to DMA/USPS-T16-3(a).

- (a) Please state what percentage of weighted container tallies is for identical containers according to the 1995 Platform Study,
- (b) Please confirm that, according to Table 8, Periodicals comprised 13.3 percent of items in containers in the 1995 Platform Study. If not confirmed, please provide the correct figure.
- (c) Please confirm that the percentage of periodicals in containers in the 1995 Platform Study (see (b), above) includes both items in identical containers and items in non-identical containers. If not confirmed, please explain.
- (d) Please confirm that Periodicals comprised 11.2 percent of items in non-identical containers in the 1995 Platform Study. If not confirmed, please provide the correct figure.
- (e) Please state the percentage of weighted items-in-identical-container tallies in the 1995 Platform Study that was comprised of Periodicals.
- (f) In an electronic spreadsheet, please provide a table (in a format similar to that of Table 8 in your testimony) that shows the subclass profile of items in identical containers from the 1995 Platform Study.
- (g) In an electronic spreadsheet, please provide a table (in a format similar to that of Table 8 in your testimony) that shows the subclass profile of single items from the 1995 Platform Study.
- (h) In an electronic spreadsheet using the 1995 Platform Study data, please provide a table that provides the item type and loose shape profile individually for identical containers, identified containers, non-identified containers, and single items.

MPA/USPS-T16-6 Response.

(a)	As stated in my response to DMA/USPS-T16-1(f), "[t]here were 719 container
	tallies of which 53 were for identical containers. Identical containers represent 6%
	of the weighted container tallies."
(b)	Confirmed.
(c)	Confirmed.
(d)	Confirmed.
(e)	Of weighted items in identical containers, 17.4% were Periodicals.
(f)	I am providing the requested subclass profile of items in identical containers from
	the 1995 Platform Study on worksheet "6f" of workbook file mpa-3-11.xls in USPS-
	LR-I-246.
(g)	I am providing the requested subclass profile of single Items from the 1995
	Platform Study on worksheet "6g" of workbook file mpa-3-11.xls in USPS-LR-I-246
(h)	I am providing the item type and loose shape profile individually for identical

containers and single items on worksheet "6h" of workbook file mpa-3-11.xls.

Please note that the 1995 Platform Study did not collect data for identified and non-identified containers.

MPA/USPS-TI6-7. Please refer to the document labeled USPS LR-I-115 1995 Platform Study.

- (a) Please provide a copy of all training materials that were provided to the Christensen Associates personnel who collected data for the 1995 Platform Study.
- (b) Please provide a copy of all written instructions that were provided to the data collectors.
- (c) Please describe all training that was provided to 1995 Platform Study data collectors.
- (d) Please describe all oral instructions that were given to the data collectors.
- (e) Before performing the study, were the data collectors informed that there is a strong association between item type (particularly sack color) and mail class? If so, please explain who informed them of this strong association.
- (f) Before performing the study, did the data collectors have any reason to believe that there is a strong association between item type (particularly sack color) and mail class? If so, why did they believe that there was a strong association?
- (g) Did the data collectors report to you? If not, to whom, at Christensen Associates, did they report?
- (h) in the 1995 Platform Study, how long were data collectors given to complete a tally for one container (including any information they collected about single items and loose shapes)?
- (i) Please state what the time interval was between tallies in the 1995 Platform Study. If this figure was variable, please provide the average time interval between tallies and describe the method used to determine how large the time interval should be.
- (j) What instructions were given to mailhandlers to ensure that they did not interrupt the data collection effort? Who provided them with these instructions (e.g., USPS facility manager, Christensen Associate personnel)?

- (k) Please describe how facilities were informed that Christensen Associates personnel were going to collect data at their facility.
- (i) What percentage of tallies in the 1995 Platform Study were recorded as not handling tallies?

MPA/USPS-T16-7 Response.

- (a) I am providing a copy of the training materials from the 1995 Platform Study in USPS-LR-I-246.
- (b) I am providing a copy of the written instructions from the 1995 Platform Study in USPS-LR-I-246.
- (c) The materials described in parts (a) and (b) were provided to data collectors at a day-long training session conducted at Christensen Associates. In addition to going through the data collection forms, instructions, and handouts, a variety of mail pieces were provided so that data collectors could practice identifying subclasses of mail.
- (d) Oral instructions were given that reiterated written materials.
- (e) Data collectors were not specifically told what mail classes to expect in sacks or any other item type.
- (f) Several of the data collectors had had previous acceptance-unit and in-plant experience, and so would have known the common operating/mail preparation

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associations of sack color to class, but also would have been aware that those associations were not 100 percent reliable.

- (g) Mike McGrane was in charge of the study. I served as lead data collector at two of the eight survey sites. In addition to Mr. McGrane, Dan Talmo, Marianne Ley, and Stacey McCullough served as on-site lead data collectors at the other survey facilities.
- (h) As explained in USPS-LR-I-115, "[t]he minimum time for a tally was set at five minutes ..." In other words, tallies taking less than five minutes to complete were spaced five minutes apart. Tallies requiring more than five minutes to record took as long as required to complete counting of the observed container, item or mail plece or as long as possible to count without delaying processing of the mail.
- (i) For tailies taking more than five minutes to complete, there was no time interval between the completion of one taily and the start of the next taily other than the time it took to find the next employee for sampling. Tallies requiring less than five minutes to complete were spaced five minutes apart between taily start times. The ASCII text file, mstr095.prn, submitted as part of USPS LR-I-115 is a list of all taily observations and includes the start time for each taily.
- (j) To my knowledge, Postal supervisors specifically instructed mail handlers to cooperate with data collection efforts to the greatest extent possible without delaying the mail.

- (k) Facilities selected for data collection were notified by two letters, one from William Henderson (Executive Vice President/Chief Operating Officer) directed at the plant managers and one directed to finance managers from Michael Riley (Senior Vice President/Chief Financial Officer). Copies of both letters are being provided in USPS-LR-I-246.
- (I) There were 1,708 tallies taken in the 1995 Platform Study, of which 704 were not-handling tallies. Not-handling tallies represent 34 percent of the weighted tallies in the study.

MPA/USPS-TI6-8. Please refer to spreadsheet dmat16q1,xls, worksheet 1e, which you provided in response to DMA/USPS-T16-1. Please provide a coefficient of variation for each percentage on this worksheet.

MPA/USPS-T16-8 Response.

I did not compute coefficients of variation for the percentages contained in this worksheet, and so am unable to provide them.

MPA/IJSPS-TI6-9. Please refer to spreadsheet dmat16q1.xls, worksheets 1c and 1d, which you provided in response to DMA/USPS-T16-1. Please provide corresponding spreadsheets for direct items and identical containers using 1995 IOCS data for Platform operations, including both the subclass profile by item type and the number of items included in the IOCS sample for each item type. Please also provide a coefficient of variation for each percentage distribution figure provided.

MPA/USPS-T16-9 Response.

I am providing the requested subclass profile of direct item tallies using 1995 IOCS tally data on worksheet "9" of workbook file mpa-3-11.xls in USPS-LR-I-246. Please note that IOCS identical container tallies do not contain information on item types (see USPS-LR-I-14, Handbook F-45, In-Office Cost System, Field Operating Instructions, at pages 12-5 through 12-7). Therefore I am unable to supply the requested subclass profiles by item type for items in identical containers.

MPA/USPS-TI6-10. Please refer to spreadsheet DMAt16q1,xis, worksheets 1b, 1c, 1d, and 1e, which you provided in response to DMA/USPS-T16-1. Please provide a corresponding spreadsheet that aggregates the subclass profiles for each piece and item type. In developing this spreadsheet, include all tallies for single pieces and single items (worksheets 1b and 1c), all tallies for items and loose pieces in identical containers (worksheet 1d), and all tallies for items and loose pieces in non-identical containers (worksheet 1e) from the 1995 Platform Study. The aggregation should use the appropriate relative weights for the different types of tallies. Please also provide a coefficient of variation for each percentage distribution figure provided.

MPA/USPS-T16-10 Response.

I am providing the requested subclass profile of the handling tallies from the 1995

Platform Study on worksheet "10" of workbook file mpa-3-11.xls in USPS-LR-I-246.

Please note that I did not compute coefficients of variation for these percentages, and so am unable to provide them.

MPA/USPS-TI6-11. Please refer to spreadsheet DMAt16q1.xls, worksheets 1d and 1e, which you provided in response to DMA/USPS-T16-1. These worksheets describe the subclass profile of items and loose pieces in identical and non-identical containers, and they include a figure for each item type of the "number of items (unweighted)."

- (a) Please explain what the "number of items (unweighted)" refers to.
- (b) Please state whether when a worker who is handling a container is sampled a tally is taken for every item in the container or whether the data collector records only one tally for each item type in the sampled container. If the latter, please state whether the data collector sampled all items of the item type or just one item of the item type.
- (c) Please state the number of identical containers that was sampled and the number of non-identical containers that was sampled in the 1995 Platform Study.

MPA/USPS-T16-11 Response.

- (a) The "number of items (unweighted)" refers to how many actual items were surveyed to develop the profile shown for each item type.
- (b) Each tally represents a sampled worker. In the case of a worker who is handling a container, the number of items by type and loose pieces by shape and subclass contained within the container are recorded. Then for each item type found in the container, two items are completely inventoried to get a piece distribution by shape and subclass.
- (c) There were 719 containers sampled of which 53 were recorded as identical and 666 were non-identical.

DECLARATION

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.

Date: 3-24-00

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.

Eric P. Koetting

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