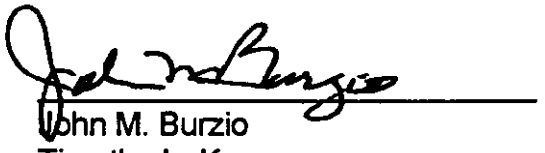
BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D. C. 20268-0001

POSTAL RATE AND FEE CHANGES, 2000	:	Docket No. R2000-1

RESPONSES OF TIME WARNER INC.
TO INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE
TO WITNESS HALSTEIN STRALBERG (USPS/TW-T1-9-15)
(June 26, 2000)

Time Warner Inc. (Time Warner) hereby provides the responses of witness Halstein Stralberg (TW-T-1) to Postal Service interrogatories USPS/TW-T1-9-15 (filed June 12, 2000). Each interrogatory is stated verbatim and followed by the response.

Respectfully submitted,



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RESPONSE OF WITNESS HALSTEIN STRALBERG TO INTERROGATORY OF UNITED STATES POSTAL SERVICE

USPS/TW-T1-9. Please refer to the mail processing unit costs on the worksheet entitled 'CRA Cost Pools' within MPA-LR-2.

a) Please confirm that these mail processing unit costs are identical to the mail processing costs on the worksheet entitled 'CRA Cost Pools' within USPS LR-I-90. If you do not confirm, please explain.

b) Please confirm that these mail processing unit costs do not reflect any changes due to proposed volume variability, cost reduction program, cost allocation, or cost distribution differences. If you do not confirm, please explain.

c) Please confirm that, if these mail processing unit costs reflected any changes due to proposed volume variability, cost reduction program, cost allocation, or cost distribution differences, then the proposed presort/automation cost differentials calculated from MPA-LR-2 would, in all likelihood, be different. If you do not confirm, please explain.

d) Please confirm that platform handling costs are included. If you do not confirm, please explain.

USPS/TW-T1-9.

a-c. Confirmed. I am well aware that changes in cost allocation and/or volume variability for different cost pools, including changes proposed in my testimony and the testimonies of other Periodicals industry witnesses, will impact the presort cost differentials that eventually are used by the Commission to set rates. It is my assumption that the Commission will make the necessary changes in the worksharing models after it has decided all cost attribution issues, as it did in Docket No. R97-1.

d. Platform handling costs are defined as "not worksharing related" both in MPA-LR-2 and in USPS-LR-I-90. That means that platform costs have no impact on the computed presort cost differentials. Nor do platform costs have any impact on my estimates of costs associated with bundle breakage or on my estimates of the difference in unit costs between 5-digit pallets and 3-digit pallets.

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USPS/TW-T1-10. Please refer to your testimony at page 50 at 15-16 where you state that you "corrected Yacobucci's treatment of carrier route sacks" and to cell C20 in the worksheet entitled 'Productivities' in MPA-LR-2. Also, please refer to the response to TW/USPS-T25-1 subpart (f): Tr. 5/1463 which states the following. "Please note that the model uses the productivity for **both** Periodicals Regular Rate and Periodicals Nonprofit mail. Thus, if a packages per hour productivity is used in the analysis, either a weighted-average packages per hour productivity or two distinct packages per hour productivities should be used for cost modeling purposes [emphasis added]."

(a) Please confirm that your correction uses a conversion factor of 1.4 packages per Periodicals Regular Rate sack. If you do not confirm. please explain.

(b) Please confirm that the model uses the conversion of 1.4 packages per Periodicals Regular Rate sack in developing costs for Periodicals Nonprofit mail. If you do not confirm, please explain.

(c) Please confirm that your correction does not reflect the number of packages per Periodicals Nonprofit sack. If you do not confirm, please explain.

(d) Please provide the weighted-average packages per Periodicals Regular Rate and Nonprofit sack.

(e) Please provide the number of packages per Periodicals Nonprofit sack.

USPS/TW-T1-10. Please note that the correction you refer to was relevant only for carrier route sacks. I will assume in the following that your questions regarding the number of packages per sack for regular rate and nonprofit Periodicals refer to carrier route sacks only. Please also note that the methodology used in USPS-LR-90 effectively assumes that each carrier route sack contains exactly one package.

a. Confirmed, referring to carrier route sacks.

b. Confirmed, referring to carrier route sacks. I also confirm that this was an oversight, and that it would have been more correct to use the nonprofit packages per sack number to analyze nonprofit Periodicals. To do so, all one needs to do prior to running an analysis of nonprofit Periodicals is to replace the formula 99.4*1.4 in cell c20 on the 'Productivities' spreadsheet page with the formula 99.4*1.184.

c. Confirmed.

d. According to the numbers presented in LR-I-87, it appears that the weighted-average number of packages per Periodicals Regular Rate and Nonprofit carrier route sack is 1.35.

e. According to the numbers presented in LR-I-87, it appears that the average number of packages per nonprofit carrier route sack is 1.184.

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USPS/TW-T1-11. Please refer to your testimony at page 47 at 25-26 where you state that assuming 10% of bundles break in subsequent bundle handling operations "severely distorts the [cost] relationship" and to your testimony at page 49, footnote 36, where you state that "I found these secondary breakage ratios have little impact on the model results." Please reconcile the two statements.

USPS/TW-T1-11. I think you may have misread the paragraph from which you quote on page 47 of my testimony. The severe distortion I refer to is that caused by assuming the same bundle breakage ratio for sacked and palletized mail. The paragraph also states that since palletized bundles tend to have more secondary sorts, the net effect is to assume that they break more than sacked bundles. That does not contradict my later observation which you also cite, that the primary breakage ratio is the one with by far the largest cost consequence.

There appear to be at least two main reasons why the primary breakage ratio is the one with most consequences. First, many bundles go through only one bundle sort before they need to be broken anyway. Second, when a bundle breaks at an early stage, e.g., a carrier route bundle on an ADC pallet breaking as it is dumped on an ADC sorting belt, the pieces from that bundle may have to go through several piece sorting operations. If a bundle breaks later, it will already have made it to a higher sort level where fewer piece sorts remain to be performed.

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USPS/TW-T1-12. Please refer to cell BA94 in the worksheet entitled 'MF Model' in MPA-LR-2 and to cell BA94 in the worksheet entitled 'Mailflow Model' in USPS LR-I-90,

(a) Please confirm that, starting with 10,000 Periodicals Regular or Nonprofit pieces, the following number of pieces are finalized within MPA-LR-2. If you do not confirm, please explain and provide the number of pieces finalized.

	SCENARIOS	PIECES
i.	29 8 30 sacked	9,989
ii.	29 & 30 palletized	10,171
iii.	39 & 40 sacked	10,183
iv.	39 & 40 palletized	10,046
v.	45 & 46 palletized	9,977

(b) Please confirm that, starting with 10,000 Periodicals Regular or Nonprofit pieces, 10,000 pieces are finalized for scenarios 29, 30, 39.40,45, & 46 within USPS LR-I-90. If you do not confirm, please explain and provide the number of pieces finalized.

(c) Please explain why each of the finalized pieces listed in subpart (a) above (from MPA-LR-2) does not equal 10,000.

(d) Please provide the number of pieces that are finalized for the scenarios in subpart (a) for which the worksheet 'MF Model Costs' within MPA-LR-2 develops costs.

USPS/TW-T1-12.

a. Not Confirmed. The number of pieces finalized, when starting with 10,000, is exactly 10,000 in each scenario and for each container type. The formula in cell BA95 on spreadsheet page 'MFModel' is incorrect when applied to scenarios with carrier route bundle presort. Since this formula only provides a check on the pieces finalized, there is no impact on the presort or automation related unit costs computed by my model.

The apparent problem results from the fact that the verification formula in cell BA95, essentially the same formula as that used in LR-I-90, is inconsistent with the improved methodology for modeling bundle breakage that is introduced in MPA-LR-2. Specifically, the formula does not recognize the distinction between first entry breakage percentage and first entry "suspect" percentage, which I have used

as a proxy for the breakage rate in secondary bundle sorting. Nor does it recognize the distinction I make between breakage in manual and mechanized sorting of palletized bundles.

A modified version of the spreadsheet in MPA-LR-2, where the formula in cell BA94 has been corrected, will be filed as MPA-LR-8.

b. Confirmed.

c. See my answer to subpart (a) above.

d. See my answer to subpart (a) above.

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USPS/TW-T1-13. Please refer to cells AD1l:AD14 in the worksheet entitled 'MF Model Costs' within MPA-LR-2.

(a) Please confirm that the total pieces and bundles calculation sums the number of intact bundles, broken bundles, and pieces from broken bundles. If you do not confirm, please explain.

(b) Please confirm that the total pieces and bundles calculation should only sum the number of intact bundles and pieces from broken bundles. If you do not confirm, please explain.

(c) Please confirm that, when bundles break and the pieces are keyed on the SPBS. your total pieces and bundles calculation (as discussed in subpart (a)) overstates the number of total pieces and bundles which then incorrectly decreases the adjusted mechanized bundle sort productivity. If you do not confirm please explain.

USPS/TW-T1-13.

a. Not confirmed. The pieces which are added to the sums in cells AD11-AD14 are those pieces from broken bundles that are individually keyed on the SPBS, rather than being sent to a proper flats sorting operation. The latter is considered by far the more efficient method if the bundles themselves cannot be recovered. Since it is assumed that the practice of keying individual flats from broken bundles on the SPBS will have been eliminated by the test year, in compliance with Headquarters instructions issued on December 30, 1999 (see response to MPA/USPS-T10-6), there are in fact no pieces to add to the sum in cells AD11-AD14, except when the model is used to estimate the likely test year reduction in bundle breakage costs.

b&c. I cannot confirm, for the following reasons.

The mechanized bundle sorting productivity rate provided by USPS witness Yacobucci and used also in MPA-LR-2 is based, essentially, on dividing the SPBS machine counts of total items keyed by the manhours clocked into SPBS operations. If a bundle breaks before it reaches the SPBS keyer, it will not be keyed and therefore not counted as SPBS volume. In that sense, the productivity rate used in LR-I-90 could be said to overstate the cost per unbroken bundle, since some SPBS hours are caused by broken bundles that are not included in the SPBS machine count, even though they may incur costs equal to or higher than the bundles which

do not break. On the other hand, if individual pieces from some broken bundles are also keyed, thereby inflating the machine count, then the per bundle SPBS productivity estimate could be too high. That is, the cost per unbroken bundle may be more than assumed in LR-I-90.

Stated differently, several types of entities are handled in the SPBS operation, including intact bundles, broken bundles and those pieces from broken bundles that are keyed individually on the SPBS. The first and last groups contribute to the SPBS read count. All three groups use up manhours and thereby incur costs. Absent further studies, which I hope the Postal Service will undertake soon, one cannot know with certainty whether the true SPBS productivity rate per unbroken bundle is equal to, higher than or lower than the rate used in USPS-LR-I-90 and MPA-LR-2.

My objective was simply to get a rough estimate of the costs added when pieces from broken bundles are keyed individually on the SPBS. I do this by modifying the LR-I-90 productivity rate by a factor whose nominator is total bundles entered for bundle sorting at a given presort level and whose denominator is total bundles entered for sorting plus the pieces from broken bundles that are keyed individually on the SPBS. Your question appears to suggest that the total bundle count in this formula should be replaced by the number of bundles that remain intact, both in the nominator and denominator. That would have the effect of slightly lowering the factor applied to the productivity, and thereby slightly increasing the estimated cost of keying pieces individually on the SPBS. I don't think there exist sufficient data to be able to assert that one method is more accurate than the other.

See also my response to USPS/TW-T1-14.

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USPS/TW-T1-14. Please refer to your testimony at page 50 at 10-11 which discusses broken bundles in manual bundle sorting operations and to cells AH8:AN14 in the worksheet entitled 'MF Model Costs' in MPA-LR-2.

(a) Please explain your manual productivity adjustment.

(b) Please confirm that you adjust the manual productivities downward to account for the costs of handling broken bundles. If you do not confirm, please explain.

(c) Please confirm that the response to TW/USPS-T-25-2 subpart (i): Tr. 5/1466 states the following. "The model uses manual package handling productivities from USPS LR-I-88. These productivities were derived by measuring the time it took to handle observed packages, even if that handling involved some form of package recovery. Hence, these productivities account for any package recovery." If you do not confirm, please explain.

USPS/TW-T1-14.

a. The adjustment assumes that when a bundle breaks in a manual bundle sorting operation, it incurs handling costs that are three times larger than if it did not break. The extra costs would be incurred performing activities such as removing the individual pieces from the opening belt, facing the pieces if necessary and placing them in some type of container that subsequently is taken to piece distribution. In addition, if a bundle has a presort level higher than the operation at which the bundle sort occurs, then the pieces will require more piece sorting than if the bundle had remained intact. The assumed factor of three can be varied by adjusting cell b22 in the 'Control Sheet' worksheet.

b. Confirmed.

c. Confirmed that you have quoted correctly from witness Yacobucci's response to TW/USPS-T-25-2 subpart (i). The following are some comments on your implied argument that the manual bundle sorting productivity rates used already include the extra costs of broken bundles.

   If one could assume that the manual bundle sorting productivity rates in USPS LR-I-88 were accurate under the FY98 degree of bundle breakage, if one could determine accurately what the extra handling cost per broken bundle is, and also determine

with accuracy what the percent of broken bundles is at manual bundle sorting operations at each sort level, then one could also obtain accurate estimates of what the bundle sorting costs would be, at each bundle sort level, if there were no premature bundle breakage. Were this possible, the ideal model of flat piece and bundle handling costs would start with somewhat higher manual productivity rates and then account explicitly for the additional cost of broken bundles. The result would have been a slightly lower estimate of the costs of bundle breakage, and slightly higher estimates of the cost differentials between presort levels.

I did not attempt to make this type of adjustment because it would only lead to an illusion of accuracy that is not really justified. The effect of such an adjustment would be very small compared with the effect of the inaccuracy that results from, for example, not having separate bundle sorting productivity estimates for mail in sacks and on pallets (bundle sorting of sacked mail is in reality considerably more expensive, whether done on a SPBS or manually). It would also be very small compared with the distortion caused by averaging the bundle sorting productivity rates in 3-digit, ADC and mixed ADC sorting, as is done in USPS-LR-I-90, or by the totally misleading bundle breakage percentage used in USPS-LR-I-90.

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USPS/TW-T1-15. Please refer to your testimony at page 50 at 19-21 and to footnote 38 which discuss the deaveraged manual bundle sorting productivities. Please also refer to TW/USPS-T25-3: Tr. 511468-1470.

(a) Please confirm that the Outgoing Primary manual package handling productivity is developed based on one observation. If you do not confirm, please explain.

(b) Please confirm that the ADC manual package handling productivity is developed based on three observations. If you do not confirm, please explain.

(c) Please provide the complete footnote 38.

USPS/TW-T1-15.

a & b. Confirmed that according to the answer provided by USPS witness Yacobucci to TW/USPS-T-25-3, the LR-I-88 estimate of mixed ADC manual bundle sorting productivity resulted from observations made in one facility, and the estimate of ADC bundle sorting productivity rates was based on observations made in three facilities.

It is unfortunate that the LR-I-88 study only looked at one and three manual opening units performing mixed ADC and ADC bundle sorting respectively. However, that does not justify averaging the results for different sort levels when doing so has the effect of blurring that which the model was meant to estimate, namely the cost differentials between mail with different presort levels. As pointed out in my testimony, I do not find the large difference in bundle sorting productivity between the three sort levels to be surprising. It is what one would expect, given the predominance of sacked mail in the mixed ADC sorting operation. Pallets must be presorted to ADC or finer, and palletized bundles, which cost much less to sort than sacked bundles, would therefore not appear in a mixed ADC bundle sorting operation.

It also is not unprecedented to set postal rates based on observations from just a few facilities, or even just one. For example, in Docket No. R80-1, rate distinctions between inter-BMC and intra-BMC parcel post, and a non-

machinable parcel surcharge, were established based on a study that I had performed in just one facility, the San Francisco BMC. In Docket No. R84-1, that study was expanded to three facilities, including two BMC's and one ASF, as described in USPS-T-14 from that docket, and continued to form part of the basis for parcel post rates.

c. Due to an editing error, the final line of footnote 38 was dropped from page 51 of the filed version of my testimony. The complete text of the footnote is as follows:

"It is not surprising that they are different, with mixed ADC sorting being more expensive than ADC and 3-digit sorting. There are no "mixed ADC" pallets, or at least very few, so that a mixed ADC bundle sort would be sorting of sacked mail only. Manual bundle sorting of sacked mail is much more time consuming than for palletized mail, even though the difference is not revealed by the averaged productivity rates Yacobucci provides. The difference is due both to the extra time spent opening, shaking out and storing sacks, bundle breakage and the greater ease of locating the address on bundles lifted from pallets with their orientation still intact."

A corrected page 51 is attached to this response.

E. ESTIMATES OF BUNDLE BREAKAGE COST SAVINGS

With all the attention given to bundle breakage, both by the Postal Service and mailers, I believe there will be a substantial reduction in both the incidence of breakage and the cost consequences when breakage occurs. The Postal Service, however, has not included any reduction of these costs in its roll forward projections.

I performed a simple analysis using the model described above to estimate the potential savings, assuming the following changes would occur in the test year:[39]

- Bundle breakage and "suspect" rates in Table V-1, assumed to apply in FY98, would be reduced to half in FY2001, due to various joint USPS/industry efforts, discussed in detail in the testimonies of MPA witnesses Cohen and Glick.

- In the test year, no loose pieces from broken bundles would be keyed individually on the SPBS machines, as emphasized in a recent written instruction from Headquarters to managers in the field. Response to MPA/USPS-T10-6, Attachment (filed February 23, 2000); see also Tr. 5/1707.

The results were as follows. For regular rate Periodicals, a change from base year to test year assumptions reduced the average modeled cost per piece from 5.754 cents to 5.514 cents, a saving of 0.24 cents per average piece.[40] With the 7.352 billion after rates regular rate pieces assumed by witness Taufique (see Taufique's Periodicals rate design spreadsheet, LR-I-167), this translates into a total saving of $17.64 million. For nonprofit periodicals, the modeled cost went down from 4.173 to 4.007 cents per piece, a saving of 0.166 cents per piece, which for 2.052 billion after rates pieces gives a test year saving of $3.406 million per year.

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address on bundles lifted from pallets with their orientation still intact.

[39] In MPA-T-2 witness Glick describes a similar analysis, applying the model to both Periodicals and Standard A mail. The model is not set up to analyze Standard A ECR mail, which I believe is also affected by bundle breakage and likely to benefit from the improvements discussed here.

[40] In the MPA-LR-2 spreadsheet, the modeled per piece costs under a given set of assumptions are shown in spreadsheet cell G54 on worksheet 'Sc Costs' as cents per average piece, excluding platform costs and the CRA adjustment.

DECLARATION

I, Halstein Stralberg, declare under penalty of perjury that the foregoing answers to interrogatories are true and correct, to the best of my knowledge, information and belief.

Date: June 23, 2000

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with sections 12, 25(a), and 26(a) of the Rules of Practice.

Timothy L. Keegan

June 26, 2000