0 0 6 0 ØRIGINAL

RECEIVED D== 6 4 1- PH -30 POSTAL RATE CTRUCTON OFFICE OF TESSELARY

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

SPECIAL SERVICES REFORM, 1996

۰

Docket No. MC96-3

REBUTTAL TESTIMONY OF

JOE DEMAY

ON BEHALF OF

UNITED STATES POSTAL SERVICE

DEC 5

TABLE OF CONTENTS

1- L

Autobiographical Sketch	1
I. Purpose of Testimony	2
II. Standard Method	3
III. Weight Averaging Method	4
IV. Weight Averaging of Mystic Color Lab Business Reply Mail	6
A. How Weight Averaging is Performed for Mystic	7
B. Problems With the Weight Averaging of Mystic BRM	8
V. Reverse Manifesting of Nashua Business Reply Mail	10
A. How Reverse Manifesting is Performed by Nashua	13
B. Problems With the Current	
Reverse Manifest System at Nashua	15
C. Nashua Reverse Manifest System Performance	16
1. Individual Piece Errors	16
2. Individual Sampling Errors	18
3. Total Postage Errors	19
D. Analysis of Individual Piece Errors	20
1. Film Canister Errors	20
2. No BRM Price Errors	22
3. Missing Piece Errors	23
4. Breakpoint Errors	25
E. Lack of A Manifest Printout	25
F. Other Operational Issues	26
G. Summary of Nashua's System Performance	2.9
VI. Conclusion	30

i

AUTOBIOGRAPHICAL SKETCH

2

1

My name is Joe DeMay. I am a Classification Support Specialist from the Northern Virginia Rates and Classification Service Center (RCSC) and am domiciled at the Youngstown, Ohio post office located at 99 S. Walnut St., Youngstown OH 44501-9609. I have worked for the Postal Service for 24 years.

8 I have been in my current position since 1993 and I am responsible for reviewing 80 postage payment systems in the Akron, Cleveland, Columbus, 9 Pittsburgh, Erie and Charleston, WV postal districts. I also provide technical 10 assistance to postal customers and employees in those areas as well. Part of 11 12 this assistance includes working with Nashua Photo Inc. (Nashua) of Parkersburg, WV to develop several postage payment systems. 13 Prior to coming to the RCSC, I was the Akron Management Sectional 14 Center (MSC) Manager of Mailing Requirements from 1987 to 1993. My 15 16 previous positions include Youngstown MSC Manager of Mailing Requirements from 1985 to 1987 and bulk mail clerk from 1983 to 1985. I 17 also have served as acting Manager of the Northern Virginia RCSC. This is 18 my first appearance before the Postal Rate Commission. 19

1 I. Purpose Of Testimony

The purpose of this testimony is to explain why the Commission 2 should not recommend either of the alternative rate classification proposals 3 for Business Reply Mail (BRM) set forth in the testimony of witness John 4 Haldi (NMS-T-1; Tr. 6/2051). In doing so, I will provide information 5 6 describing some of the current procedures utilized by the Postal Service to calculate and collect the postage and fees for nonletter-size Business Reply 7 8 Mail (BRM). Three different methods of calculating BRM postage and fees 9 for nonletter-size BRM will be described - the standard method, and two of the alternative methods, weight averaging and reverse manifesting. 10

Much of my testimony will focus on the problems with weight 11 averaging as it is being conducted at Mystic Color Lab (Mystic) and with 12 reverse manifesting as it is being conducted at Nashua. I will also point out 13 numerous instances in which witness Haldi mischaracterizes how the Mystic 14 and Nashua systems operate and exaggerates their accuracy and reliability. 15 This mischaracterization and exaggeration is more than trivial. Rather, it 16 goes to the heart of whether the Commission can confidently rely on witness 17 Haldi's testimony alone to make a recommended change in the BRM fee 18 schedule. 19

20 Some of the problems I will discuss, which are associated with the 21 operation and administration of the alternative methods utilized to calculate 22 and collect postage and fees for Mystic's and Nashua's Business Reply Mail, 23 were known prior to the Postal Service's establishment of the Business Reply

Mail Re-engineering task force (BRM task force) which is described in the rebuttal testimony of Gary Infante (USPS-RT-6). Other problems, however, were only discovered in recent months as the BRM task group started working. It is evident from a review of the previously known problems and the newly discovered problems that additional work is still needed to improve the operation and administration of these alternative methods to ensure that postal revenues are properly protected.

8

9 II. Standard Method

Nonletter-size BRM is part of the regular mailstream until the Postal Service removes it in order for the postage and fees to be calculated. This normally takes place at the destination post office. In larger facilities, this function is usually performed by full-time, postage due clerks. At smaller offices, this function is usually performed by distribution and window clerks, or postmasters.

Depending on the volume received, the nonletter-size pieces may be separated by customer permit holder into two categories - flats and parcels. The postal employee weighs each piece of mail individually to determine the appropriate amount of postage, as well as the BRM handling fee.

The employee uses an adding machine or worksheet to enter the amount of postage for each piece of mail as it is weighed. When all the pieces for a particular permit holder are weighed, the clerk enters the total

postage amount on a Postage Due Bill, PS Form 3582-A.¹ This amount is 1 then deducted from the permit holder's account (unless the customer is using 2 the cash payment option) and a postage due meter tape for the amount of 3 postage is affixed to the Postage Due Bill. The Postage Due Bill is then 4 forwarded with the mail when it is placed back into the mailstream for 5 delivery. For smaller volume customers, a Postage Due Bill may not be 6 prepared and the postage due meter tape will be affixed directly on the top 7 piece of mail of the bundle. 8

9 The standard method is utilized at all post offices and requires Postal 10 Service employees to calculate the postage for each individual piece of BRM. 11 In situations where a customer receives large volumes of nonletter-size BRM, 12 the standard method of handling each piece of mail individually may not be 13 practical. In these situations, some local post offices have implemented 14 alternative methods based on weight averaging.

15

16 III. Weight Averaging Method

One method used to calculate postage for incoming Business Reply (and Postage Due) Mail is weight averaging. Weight averaging is normally implemented by local post offices which receive large volumes of nonlettersize return and/or reply mail in order to speed up the processing of the mail. In preparation for implementation of weight averaging, the local post office analyzes the types of mail which make up the return mail universe and

¹ Attachment A to this testimony.

1 what type of separation may be required. Since Business Reply Mail is all 2 First-Class Mail, the only separation which might be required is between the 1-11 ounce pieces and Priority (over 11-ounce) Mail pieces. Once the mail is 3 4 separated, the local post office then calculates and records the postage due 5 (postage plus BRM fee) and weight for each individual piece, as well as the 6 total pounds and total postage. This is done over several days or several 7 weeks until the local post office determines a large enough volume has been 8 sampled. The postage and weight information for the individual pieces is then used to determine a postage per pound for the return mail. Once the 9 10 postage per pound has been established, all future postage is determined by 11 obtaining the bulk, net weight of the return mail and multiplying that weight 12 by the current postage per pound factor. That postage per pound factor is used until it is updated. 13

The BRM task force has discovered that weight averaging is 14 somewhat common in the Postal Service. Generally weight averaging is used 15 for regular returned parcels, but it is also utilized for Business Reply Mail as 16 well. The team also discovered that there are no standard operating 17 procedures for establishing and maintaining weight averaging. The sampling 18 procedures for the initial sampling, as well as the procedures for updating the 19 postage per pound factor, vary by site. This has resulted in inconsistencies. 20 Also, in general, weight averaging has been designed and implemented by 21 local postal employees who have little, or no, background or training in 22 statistical methods. The primary objective of weight averaging is to move 23

1 the mail faster. The BRM task force has determined there is a need to see that statistically valid methods are developed and implemented at offices 2 utilizing weight averaging. The team has also found that the administration 3 4 of these weight averaging needs to be improved to ensure the required updating of the cost per pound is completed. The collection of the proper 5 postage and fees can be compromised when the frequency for updating the 6 7 cost per pound is not maintained. The lack of these standardized procedures and the improper administration of the procedures currently in place have led 8 to the utilization of weight averaging which is functional, but flawed. 9

10

11 IV. Weight Averaging of Mystic Color Lab Business Reply Mail

Mystic is a large mail order film processing company with a plant located in Mystic, CT. Currently, Mystic's customers send envelopes containing their undeveloped film to a post office box located in New London, CT. These orders are then picked up by Mystic employees twice daily, six days a week, at the New London, CT post office.

Mystic has been a Business Reply Mail customer since 1970. Initially the postage and fees for each piece of their Business Reply Mail were calculated individually. As their volume grew, it became less practical for the local post office to handle each piece of Mystic's nonletter-size BRM individually. This large volume resulted in the New London Post Office implementing weight averaging for Mystic in December of 1984. Weight averaging eliminated the handling of each individual piece for postage

← 1

2

calculation purposes and allowed Mystic access to their mail much earlier in the business day.

3 A. How Weight Averaging Is Performed for Mystic

Initially, data were collected for individual Business Reply Mail pieces
(quantity, weight, postage, appropriate surcharges, and Business Reply Mail
handling fees) for a period of two weeks. These data were compiled to
determine a postage per pound factor. The postage per pound factor was
utilized daily by the Postal Service in the following manner:

- 9 1. All inbound Business Reply Mail was weighed and recorded
 10 (including information on the container type and tare weight).
- 11 2. Tare weight of containers was deducted from gross weight.
- Weight of Business Reply Mail was multiplied by the per pound
 factor to determined the amount to be deducted from Mystic's
 account.

4. Deduction was made from Mystic's Advance Deposit Account. 15 Mystic was required to submit a weekly report which provided the 16 Postal Service with the total number of rolls of film processed and the total 17 weight of the Business Reply Mail received from the Postal Service (less the 18 tare weight of the containers). The reports from Mystic were intended to 19 provide additional correlation data to the Postal Service. The original 20 21 agreement called for the updating of the postage per pound factor at least 22 once every six months.

The process utilized today is the same as the process as originally implemented, however, the current agreement requires that the per pound factor be updated once each Postal Service Accounting Period (thirteen times per fiscal year).

5 B. Problems With the Weight Averaging of Mystic Business Reply Mail

6 Updating the postage per pound factor on a Postal Service Accounting Period basis (thirteen times per year) was determined by the RCSC which 7 8 serves Mystic to be necessary to help ensure the accuracy of the postage and fees collected from the customer and to account for seasonal variances 9 that had been experienced in the past. Unfortunately, because of the 10 11 significant amount of work hours required to update the postage per pound, 12 the updates have only been performed once or twice a year, rather than at the required intervals.² The Postal Service has encountered this same 13 14 situation at other post offices using weight averaging. Because the Mystic update sample has only been drawn once or 15 twice a year, instead of more frequently, the Postal Service has never 16 17 collected enough data to capture any seasonality in Mystic's BRM. By seasonality, I mean changes in the characteristics of Mystic's BRM that 18 occur at different times of the year. Such changes could cause the postage 19

20 per pound amount to increase or decrease.

 \sim

 $^{^{2}}$ Again, local offices are still primarily driven by the objective of processing mail faster. They do not take the time necessary to perform the required update of the postage per pound.

One of these changes would be a change in the weight distribution of the individual pieces received. This could be the result of an increase or decrease in the number of multiple roll orders received, or new products entering the mail universe, such as single-use cameras.³ If the proportion of heavier weight pieces increases with volume surges, this would affect the postage per pound calculation.

7 Because of the potential impact changes in the return mail universe 8 can have on the postage per pound, it is essential that the postage per pound factor be updated frequently. In his testimony, witness Haldi agreed that the 9 effect of any seasonal changes could be reduced or eliminated by periodic 10 sampling.⁴ He also testified, however, that Mystic's experience, which he 11 described as being "based on repeated sampling conducted over more than 12 10 years," indicated that the mix does not change throughout the year.⁵ 13 14 That is, the rate per pound has been remarkably stable regardless of when the sample was taken. As I described above, the Postal Service has not 15 performed sampling updates frequently enough to support witness Haldi's 16 assertion. 17

18 Witness Haldi also testified that weight averaging systems are "time 19 proven."⁶ While weight averaging may have been in effect for an extended 20 period of time, without the performance of the required updatings, they

³ Another new product in the film business is the digital disk. It is too early to determine if this will be popular with consumers, but if it is, the presence of this product in the return mail universe could impact the postage per pound.

⁴ Tr. 6/2149

⁵ Tr. 6/2149

cannot be deemed statistically validated. For the first time, the issue of the
statistical validity of weight averaging is being addressed corporate-wide by
the Postal Service. One of the objectives of the BRM task group is to
develop and establish updating procedures, concerning sampling methods,
sample size, sampling frequency, etc., which are statistically valid.

6 Because we are not certain of the validity of the process for updating 7 of the postage per pound at Mystic, and the sampling there has not been 8 completed on the required AP basis, the Postal Service has no basis for 9 determining the degree to which weight averaging for Mystic provides 10 accurate or reliable results.

11

12 V. Reverse Manifesting of Nashua Business Reply Mail

Nashua is a large mail order film processing company with a plant located in Parkersburg, WV. Currently, Nashua's customers send envelopes containing their undeveloped film to post office boxes located in 19 different locations around the country. These orders are then sent, on a daily basis, via Priority Mail reship to Parkersburg. For over two years, the Postal Service has worked with Nashua Photo Inc. to help develop an alternative method to calculate the postage and fees for nonletter-size BRM, reverse manifesting.

The reverse manifest system for Business Reply Mail was implemented at Nashua in late 1994 as part of a larger project to improve the turnaround time for customer orders. The objective was to receive, process and ship

6 Tr. 6/2069

1 orders so the customer would receive their pictures within seven days of 2 mailing in their film. Nashua had been using Business Reply Mail envelopes for a small portion of their customers, but planned on switching about 25-40 3 percent of their customers to Business Reply Mail. Since implementation of 4 5 the system at Nashua, I have visited their Parkersburg facility and the Parkersburg post office on approximately 10 occasions. I have also had 6 regular contact with local and district postal employees concerning the 7 Nashua system. 8

Prior to implementation of the reverse manifest system, all of Nashua's 9 film orders had to go to the Parkersburg post office so that Business Reply 10 Mail pieces could be separated from the incoming mailstream for calculation 11 of postage and fees. Even though only a portion of their orders consisted of 12 Business Reply Mail, all of the orders had to be held until they were emptied 13 from sacks and the Business Reply Mail orders were separated out. The 14 Business Reply Mail orders were then further held while the pieces were 15 weighed and postage and fees were calculated. If Nashua was going to 16 increase their use of Business Reply Mail, and improve the turnaround time 17 for processing their orders, a better system had to be developed to process 18 their BRM. 19

The Business Reply Mail reverse manifest system implemented at
 Nashua was based largely on the principles outlined in Publication 401, Guide

to the Manifest Mailing System.⁷ While manifesting is traditionally done with 1 outgoing parcels, Nashua appeared to have some of the basic requirements 2 for a manifest system. Accordingly, a decision was made to develop a 3 manifest-like system for incoming mail. With the implementation of this 4 5 reverse manifest system, the process of separating the Business Reply Mail from the regular mailstream was no longer required. This allowed the 6 majority of Nashua's orders to bypass the Parkersburg post office and go 7 8 directly to the Nashua plant. Orders received through the Parkersburg post office did not have to be separated into Business Reply Mail and customer 9 paid mail and could be sent immediately to the Nashua plant. None of the 10 11 Business Reply Mail pieces received directly at the Nashua plant or through the Parkersburg post office had to be held at the post office for postage and 12 fee calculation purposes. Within approximately 30 minutes of arrival of the 13 Priority Mail reship at its plant, Nashua has access to its Business Reply Mail 14 for data entry and processing. (During this half hour, the incoming mail 15 sacks are separated and weighed so the correct postage for the incoming 16 Priority Mail reship postage can be calculated.) All of this allows Nashua to 17 have quicker access to its incoming film orders for processing purposes. 18

⁷ A copy of the Publication has been filed as Library Reference SSR-148

1

A. How Reverse Manifesting is Performed by Nashua

For marketing purposes, Nashua distributes a wide variety of film order 2 envelopes. In order to evaluate the effectiveness of marketing campaigns, 3 Nashua prints a specific (five-digit) media code on each of various types of 4 envelopes. The media code is printed on a tear-off portion of the envelope 5 which includes Nashua's prices. These media codes also indicate whether a 6 specific envelope is Business Reply Mail or customer paid. Many of Nashua's 7 newer envelopes have this number in a barcode format. During order 8 processing, Nashua's data entry clerks scan (if barcoded) or manually enter 9 the media code number from each envelope. 10

After the operator scans or manually enters the media code of the 11 envelope, a product code based upon the type of film, the number of 12 exposures, negatives, payment method, etc. is manually entered by the 13 operator. Incorporated into the reverse manifest system software is a table 14 of predetermined weights for film order components. When the media code 15 entered indicates the envelope used was Business Reply Mail, the reverse 16 manifest system software uses the table of predetermined weights to 17 calculate the postage, nonstandard surcharge, (if applicable), and Business 18 Reply Mail fee. At the end of the day, the reverse manifest system produces 19 a summary or facsimile postage due statement for all the pieces with a 20 Business Reply Mail media code. 21

A Detached Mail Unit (DMU), Postal Service clerk at Nashua randomly samples 50 pieces of Business Reply Mail daily (30 pieces are sampled in the

1	morning and 20 pieces in the afternoon by two different DMU clerks).
2	Approximately 70 percent of Nashua's orders are from repeat customers and
3	have return address labels with a customer number. This customer number,
4	the customer's ZIP Code, the envelope number ⁸ , along with weight and
5	actual postage is recorded by the DMU clerk during the sampling process. If
6	an order does not have a customer number, the customer's name and
7	address is recorded to help uniquely identify the piece when performing
8	verification against data entered by Nashua employees in the reverse
9	manifest system ⁹ .
10	During the verification process, the DMU clerk compares actual
10 11	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This
10 11 12	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by
10 11 12 13	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by Nashua. Postage adjustments are handled in accordance with the procedures
10 11 12 13 14	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by Nashua. Postage adjustments are handled in accordance with the procedures outlined in Publication 401. If the total postage (the First-Class Mail postage,
10 11 12 13 14 15	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by Nashua. Postage adjustments are handled in accordance with the procedures outlined in Publication 401. If the total postage (the First-Class Mail postage, as calculated by the DMU clerk) for all sample pieces is within +/- 1.5
10 11 12 13 14 15 16	During the verification process, the DMU clerk compares actual postage recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by Nashua. Postage adjustments are handled in accordance with the procedures outlined in Publication 401. If the total postage (the First-Class Mail postage, as calculated by the DMU clerk) for all sample pieces is within +/- 1.5 percent of the total manifest postage for those sample pieces, the total
10 11 12 13 14 15 16 17	During the verification process, the DMU clerk compares actual postage_recorded versus Nashua's reverse manifest system postage. This verification is performed "on-line" through a computer terminal provided by Nashua. Postage adjustments are handled in accordance with the procedures outlined in Publication 401. If the total postage (the First-Class Mail postage, as calculated by the DMU clerk) for all sample pieces is within +/- 1.5 percent of the total manifest postage for those sample pieces, the total postage due (First-Class Mail postage plus BRM fees) is collected as

⁸ The envelope number is different than the five-digit media code number that was discussed earlier. The envelope number is a four-digit number which appears on the outside of the envelope.

⁹ This is a departure from standard manifesting procedures. Ordinarily, a unique identification number is required in order to keep the cost of Postal Service verification to a minimum. Mailing labels for outgoing pieces in a normal manifest system are produced on a one-to-one basis. That is, a unique ID number/label is produced for each outgoing mail piece.

greater than +/-1.5 percent of the manifest postage, the total postage due is
adjusted according to the error percentage.

The reverse manifest system has eliminated the weighing and postage and fee calculation bottlenecks which sometimes resulted in delaying delivery of mail to the customer. This in turn has contributed to improved turnaround times for processing customer orders.

There are several problems, however, which were identified soon
after implementation of the reverse manifest that continue to be unresolved
today.

10 B. Problems With The Current Reverse Manifest System at Nashua

During the first year of operation, postage verifications conducted by 11 the DMU clerks at Nashua resulted in postage adjustments nearly every day. 12 Generally, there would only be one or two days a month that the sampling 13 results would be within the +/- 1.5% tolerance and a postage adjustment 14 not required. Most of the samplings revealed overall postage underpayments 15 and resulted in additional postage being collected from Nashua. Only about 16 once every other month would a verification sampling reveal a postage 17 overpayment and result in a refund being issued to Nashua. 18

While we are collecting additional postage through the adjustments on a regular basis, overall, we are disappointed that the system is not more accurate. We have worked with Nashua for over two years trying to resolve the problems with the manifest. While there has been some progress, the Nashua system is still plagued with problems. I strongly disagree with

witness Haldi's testimony that the Nashua system is "extremely effective"¹⁰

2 and that the system's errors show "no consistent bias."¹¹

3 C. Nashua Reverse Manifest System Performance

There are several different approaches which can be used to assess 4 5 the performance of Nashua's reverse manifest system. These approaches would include reviewing over a period of time (1) the percentage of individual 6 piece errors the system produces, (2) the percentage of daily samples which 7 require postage adjustments and (3) the percentage of total postage the 8 system calculates. A detailed discussion of the individual piece errors is also 9 included later in this section of testimony. Witness Haldi used approaches 10 (1) and (3) in his testimonv. 11

12

1. Individual Piece Errors

One approach to assessing the accuracy of the Nashua system is to 13 determine how many individual pieces the system reports at the correct rate 14 of postage and how many individual pieces the system reports at the 15 incorrect rate of postage. The individual piece error rate for a typical sample 16 during the first year was approximately 20 percent. This 20 percent included 17 all individual piece discrepancies - overpayments, underpayments and missing 18 pieces. From a system standpoint it is disturbing when the postage for so 19 many individual pieces is not correctly calculated and reported by the 20 system. The confidence level in any postage payment system is built piece-21

¹⁰ Tr. 6/2066

¹¹ Tr. 6/2064-2065

by-piece and is based on the system's ability to accurately assess postage
 for each individual piece of mail.

A review of the monthly results for postal samplings for October 1995 3 and June 1996 reveals there has been a gradual reduction in the number of 4 individual piece errors from 20 percent to 16 percent. A review of the postal 5 sampling data for the months of July, August and September of this year 6 7 shows this improvement trend has continued. The sampling data for these months reveal that the percentage of pieces reported at an incorrect rate of 8 postage was 12 percent, 14 percent, and 13 percent, respectively. In his 9 testimony, witness Haldi claimed the error rate in July 1996 was 5.7 10 percent.¹² This was not the error rate in July. As stated previously, the error 11 rate in July was actually 12 percent. The 5.7 percent error rate cited by 12 witness Haldi was for a special test sampling that was done by the DMU 13 clerk. The reasons for this test sampling and an analysis of the results are 14 discussed later in my testimony. 15

While the trend shows some improvement in the system's accuracy, the individual piece rate error remains high. An analysis of the various types of individual piece errors, their possible causes and possible solutions will be included later in this testimony.

¹² Tr. 6/2064

1

2. Individual Sampling Errors

Another method for evaluating the performance of the Nashua system 2 is to look at the error percentage of entire (daily) postal samplings instead of 3 focusing on the number of individual piece errors. How many samplings 4 were within the +/- 1.5% tolerance and how many were not and required 5 adjustments? As stated earlier, during the first year of operation, verification 6 samplings resulted in postage adjustments nearly every day. Similar to the 7 reduction in the number of individual piece rate errors during the first half of 8 1996, there also was a decrease in the number of samplings which required 9 postage adjustments. The number of samplings that require postage 10 adjustments, however, still remains high. The postal sampling data for the 11 months of July, August and September of this year reveal postage 12 adjustments were required 68%, 54% and 48% of the time respectively. 13 Again, the trend is positive, but the number of samplings requiring 14 adjustments remains high. In addition, 48 of these adjustments for the July 15 to September time period required additional postage to be paid, with only 7 16 adjustments involving a refund. If the Postal Service had to rely solely on 17 Nashua's system, without any sampling procedures, postage would be 18 underpaid on a regular basis. The overwhelming number of underpayments 19 is evidence that the system is consistently biased in Nashua's favor. 20

3. Total Postage Errors

A third method for evaluating the performance of the Nashua system 2 is to look at the difference in the amount of postage reported by the system 3 4 and the amount of postage collected as a result of postage adjustments for a given period. Below is a listing of the variation in the amount of postage 5 collected as a result of postal sampling adjustments. These numbers were 6 derived from witness Haldi's testimony which provided the estimated 7 postage on the manifest as a percentage of the postage for the pieces 8 sampled for the month.¹³ The percentage of additional postage collected for 9 10 the months of June, July, and August of this year are listed below. 2.2% additional 11 June -2.25% additional 12 Julv -August - 2.0% additional 13 The results show underpayments for each of these months, an obvious bias 14 15 in Nashua's favor. Regardless of which method is used to analyze the performance of the 16 Nashua reverse manifest system, the claim by witness Haldi that there is a 17 "no consistent bias"¹⁴ in the Nashua system is not accurate. Witness Haldi 18 even admits in his testimony that there has never been a month during which 19 the Nashua manifest system did not underestimate the amount of postage 20

¹³ Tr. 6/2065 ¹⁴ Tr. 6/2064-2065

1	and fees due in comparison to the sample. ¹⁵ In summary, all three methods
2	of error analysis reveal that Nashua's system is not accurate, generally
3	underreports postage, and needs further improvements.
4	D. Analysis of Individual Piece Errors
5	Since the implementation of the reverse manifest system at Nashua,
6	we have studied the individual piece errors and have determined that they fall
7	into four basic categories - film canister errors, No BRM Price errors, missing
8	pieces and break point errors.
9	1. Film Canister Errors
10	The most prevalent type of error is the film canister error. These types
11	of errors were not addressed specifically in witness Haldi's testimony despite
12	the impact they have had on the performance of the system. These errors
13	involve mistakes by Nashua data entry operators when indicating whether
14	there was a plastic, protective film canister in the film order envelope. When
15	the media code indicates that an order was received in a Business Reply Mail
16	envelope, the operator is prompted during the data entry process to answer
17	the question, "Is there a film canister?" These canisters weigh approximately
18	1/4 of an ounce and their presence will cause a piece containing one roll of
19	film to move from a \$0.43 piece (\$0.32 plus the \$0.11 nonstandard
20	surcharge) to a \$0.55 (two-ounce) piece. If the operator fails to accurately
21	note a canister is present, a \$0.12 underpayment results. If the operator

 \sim

notes a canister is present when it actually is not, a \$0.12 overpayment results. Historically, these errors have been in Nashua's favor.

2

1

Earlier this summer we initiated a test to learn more about the canister 3 4 type errors and also to help confirm the other types of errors which were 5 occurring. As part of this test, the postal clerk examined each BRM piece sampled and determined if there was a film canister included prior to giving 6 7 the sample pieces to the Nashua data entry clerks. The DMU clerk presented Nashua with approximately 270 pieces with a canister and approximately 8 9 270 pieces without a canister. In order to reduce the canister error problem 10 and to help identify the other types of errors which were occurring, the operators were told in advance, "These have canisters," or "These do not 11 Under these conditions the total number of pieces in the have canisters." 12 test sample that were not reported at the correct rate of postage was 31, or 13 about 5.7 percent of the pieces sampled. 14

It must be emphasized, however, that the results of this one-day test 15 sampling are not indicative of the system's overall actual performance. The 16 combined results for the daily (random) postal samplings conducted during 17 July, August, and September indicate an individual piece error rate of 13 18 percent. This test sampling simply confirmed our assumption that the 19 inability to resolve the canister situation was one of the main causes of the 20 reverse manifest system's inaccuracies. It is doubtful Nashua could or would 21 take the time on a daily basis to separate the mail prior to processing, as was 22 done for the one-day test. We have discussed reviewing the order entry 23

process to determine how the information regarding film canisters could be
 more accurately captured, but no significant changes have been made by
 Nashua.

4

2. No BRM Price Errors

5 Another type of problem with the Nashua system is an error we have termed as "No BRM Price." This situation occurs when the postal clerk 6 7 samples a piece, but cannot find a BRM price indicated when attempting an on-line verification in Nashua's system. We have determined this occurs 8 when a non-BRM media code has been entered in the system. This may 9 10 happen if the media code is entered in error, or if a Nashua customer uses part of an old order envelope (perhaps with lower prices) and includes it in 11 the BRM envelope in order to save postage. The actual order form which 12 13 contains the media code is a tear-off portion of the envelope. We have confirmed this situation does occur, but are not convinced this is the only 14 reason No BRM Price errors occur. For example, it is Nashua's policy to 15 honor any price from earlier envelopes. The results of the postal samplings 16 for July, August and September reveals this type of error occurred 47 times 17 or in about 1 percent of the pieces sampled. 18

These types of errors, as well as the missing piece errors I discuss in the next section of testimony, are significant from a system standpoint because the system does not include the postage and fees for these pieces in the postage due facsimile statement. The system treats these pieces as if they were customer paid, non-BRM orders. Every No BRM Price piece (or

missing piece) results in lost revenue. This type of error is significant
because the lost revenue is not just an additional \$0.12 or \$0.23 for an
additional postage. The postage and fee for the entire piece is "lost."
In his testimony, witness Haldi states that it may several years
before the conditions that result in No BRM errors can be eliminated.¹⁶ Since

7 possible solution we suggested was to have the operator prompted to verify

the percentage of Nashua's mail which is BRM is now approaching 90%, one

8 the media code if a non-BRM media code has been entered or scanned. So

9 far, Nashua has not taken any action on this suggestion.

10

6

3. Missing Piece Errors

On some occasions we have been unable to locate a sampled 11 mailpiece in Nashua's system. As stated in the previous section, these are 12 the most significant errors from a system standpoint. As with the "No BRM 13 Price" errors, these errors are significant because the system assesses no 14 15 postage or fees for these pieces when these types of error occur. During July, August and September there were 6 pieces, or about 0.1%, which 16 could not be found. In order to reduce the possibility of a missing piece 17 being caused by a mistake of the DMU clerk when recording the customer 18 number from the piece, the clerk always records the sender's ZIP Code. 19 (During early implementation, the DMU clerks photocopied the 50 sampled 20 mailpieces in order to provide Nashua a better opportunity to find missing 21

¹⁶ Tr. 6/2200

pieces. This process was stopped after several months because it was
 costly and did not seem beneficial.)

3 In addition to recording of the customer's ZIP Code, the envelope number on the outside of the envelope has been added to the postal 4 5 verification sampling process since the system was first implemented. 6 Despite the additional recording time this takes, both of these categories of information provide Nashua and the DMU clerk additional opportunities to 7 search for pieces which cannot be found in the system during the initial 8 9 search. While I do not have any specific figures, oftentimes missing pieces 10 are "found" in the system using these additional searching capabilities. That would tend to reduce the chances that the missing pieces are paid for twice, 11 as claimed in witness Haldi's testimony.¹⁷ Despite some reluctance on our 12 part, from a system standpoint, Nashua is always provided an opportunity to 13 use their own advanced searching capabilities to "find" missing pieces. Our 14 15 reluctance results from giving a customer (Nashua) sufficient information 16 concerning a piece to allow them to potentially "manufacture" proof the 17 piece was in the system. The fact that Nashua does not find every missing piece is a good news, bad news situation. The good news is it reveals the 18 integrity of Nashua as a company. The bad news is that the missing pieces 19 are truly missing pieces. 20

17 Tr. 6/2198

4. Breakpoint Errors

1

Other single piece errors occur when the weight of a mailpiece is right 2 at an ounce break point. These types of errors are normal in a manifest 3 system with predetermined weights for light weight components. These 4 types of errors tend to be equally split between the mailer and Postal 5 Service's favor, and by themselves would not result in a postage adjustment. 6 The possibilities for these types of errors (and all individual piece weight 7 errors) can be reduced by keeping updated predetermined weights. To our 8 knowledge, Nashua has not updated their predetermined weights since the 9 10 system was implemented.

11 E. Lack of A Manifest Printout

Most of the problems with the Nashua system discussed thus far have been day-to-day errors. In addition to these operational errors, there is a critical shortcoming in the design of the manifest system. The Nashua system cannot produce a hard copy or acceptable electronic manifest listing, as required in the Publication 401. This is a critical element the Postal Service needs in order to verify postage.

While the Postal Service can verify if a piece has been properly identified as BRM and verify the postage amount the system has assigned, the Postal Service still does not have a manifest listing to verify that a particular piece is actually included in the total postage amount on the postage due facsimile statement.

An analogy would be, if you went to your local grocery store and 1 asked the checkout clerk how much a can of green beans cost, the clerk 2 scanned the UPC code on the can, and the store's system price was 3 displayed. When you purchase your groceries, however, if the store does 4 not provide you a cash register tape (manifest listing), you cannot be sure 5 what price you actually paid for the beans, or if your grocery bill total is 6 7 correct. Without a manifest printout, the Postal Service is in the same 8 position.

Nashua has worked with their programming staff to resolve this
issue, but as of today an acceptable manifest listing is not available.

11 F. Other Operational Issues

Witness Haldi stated that if problems existed, some concerns or 12 reservations would have been raised.¹⁸ Again, this is a misleading 13 characterization of the situation. Despite the various problems associated 14 with the system, we have remained supportive of Nashua's effort. As stated 15 previously, I have visited Nashua approximately 10 times during the past two 16 years and have had telephone conversations with Jack Sigman, Nashua's 17 Manager of Production Services, and Parkersburg post office employees on a 18 regular basis concerning the reverse manifest system and all of Nashua's 19 postage payment systems. Because of this frequent contact, we have not 20 felt an overwhelming need to document our concerns in writing. After the 21

¹⁸ Tr. 6/2133

1	system had been operational for about a year, we did send a letter
2	(Attachment B) with some of our concerns regarding the system.
З	As part of our ongoing concerns, we have considered making
4	additional changes in our verification procedures. As Nashua's BRM volume
5	increased, we should have considered increasing the size of our verification
6	sample from 50 pieces a day to 70 or 100 per day based on the guidelines
7	found on page 103 of the Publication 401. In the spirit of customer
8	cooperation, a decision was made not to expand the sample size while the
9	BRM task force was working with Nashua.
10	The Postal Service is also concerned because culling is taking place
1 1	prior to the taking of samples at Nashua by the postal clerk. When orders are
12	removed from the incoming Priority Mail bags, the lightweight pieces (usually
13	containing negatives for reprint orders) and the heavy pieces (usually single-
14	use cameras or large multiple roll orders) are culled out so they can be
15	directed to different work areas in the plant. A review of the postal sampling
16	records of the Parkersburg post office, as well as those generated by Nashua
17	as part of their internal quality control procedures, ¹⁹ reveals these types of

pieces are not being included properly in the sampling. Witness Haldi has 18

testified that if culling was taking place on a systematic basis it could affect 19

the accuracy, reliability, or the representativeness of the sample.²⁰ 20

¹⁹ Provided in confidence by NMS on November 26, 1996, in response to the Postal Service's request at Tr. 6/2226-28. ²⁰ Tr. 6/2220

The existence of culling was only brought to the attention of our BRM task force recently. The Postal Service does not regard the culling to represent an attempt by anyone to distort the sampling process. Instead, the culling that takes place is the result of failure on the part of the Postal Service and Nashua to more fully coordinate their efforts and a lack of knowledge on the part of both parties at the local level concerning the representativeness of samples.

The Postal Service needs to change the sampling procedures so an 8 appropriate number of these types of pieces are included in the regular 9 sampling. By doing so, we can ensure that the lighter and heavier pieces are 10 processed within the reverse manifest system and the proper amount of 11 postage is being collected. Because these light and heavy pieces are 12 processed in different parts of the plant, we want to ensure they are subject 13 to the same data entry process as the regular weight orders. It is only during 14 the data entry process, when the media code is entered, that the piece is 15 identified as BRM and postage and fees are calculated. Any BRM pieces 16 which bypass the normal data entry system would be not be assessed any 17 postage or fees. There is a track record of how many regular weight orders 18 show up as missing pieces and No BRM Price. Because these lighter and 19 heavier weight pieces have not been sampled on a regular basis by the Postal 20 Service, we do not have enough information to evaluate the system's ability 21 to assess the proper postage and fees for these types of pieces. 22

1 We are especially concerned with the heavier weight pieces. While 2 Nashua has various predetermined component weights in their system, they 3 only have one weight for single-use cameras, despite processing cameras (of 4 different weights) which are produced by a variety of manufacturers.

We have additional concerns with heavier weight orders which are 5 received at Nashua in boxes with a BRM envelope affixed. We are concerned 6 because we are not sure what predetermined weight, if any, is being 7 assigned to these "miscellaneous" containers. Again, these culling issues 8 and the impact of the light and heavy pieces, have only surfaced recently, 9 and we have not discussed them at any length with Nashua. This is further 10 evidence that a reverse manifest system is not something which can be 11 simply taken out of the box and plugged in. Even after two years of working 12 with the Nashua system, we are finding there are still things to be learned 13 about their system. 14

15 G. Summary of Nashua's System Performance

Nashua's reverse manifest system has not reached the full level of 16 accuracy the parties had in mind when the system was first developed. We 17 expected a system that would report the correct postage and fees for every 18 piece. We expected a system which would have few daily adjustments and 19 would permit us to reduce the daily sampling to approximately once per 20 week. We expected a system that would not overstate or understate 21 postage on any regular basis. From a system standpoint, the number of 22 individual piece errors and the number of daily samples which require a 23

postage adjustment remain high. The system has failed to meet our
 expectations.

3 Our findings and possible solutions for eliminating these errors have 4 been discussed with Nashua on a continual basis, but these solutions, or 5 others developed by Nashua, have yet to be implemented.

6

7 V. Conclusion

Our experience with these mailers reveals that, despite the efforts of 8 all parties, weight averaging and reverse manifest systems used in 9 conjunction with BRM still have flaws which affect the reliability and 10 accuracy of the calculation of their postage and fees. For now, we continue 11 to utilize both systems despite these flaws, while our BRM task force works 12 13 to resolve these issues. In the case of Nashua, if they were a regular, outgoing manifest mailer experiencing these same types of performance 14 problems, we would have canceled their manifest authorization. 15 Discontinuing the current systems, however, would only result in denying 16 Mystic and Nashua quick access to their mail and delays in the fulfillment of 17 customers' orders. The decision to continue to utilize both of these systems, 18 however, should not be interpreted as an endorsement. 19 When granting a customer an authorization for a postage payment 20 system, such as weight averaging or reverse manifesting, the Postal Service 21 is providing the customer an alternative method of paying postage over more 22 traditional methods. In doing so, the Postal Service avoids the manual piece-23

by-piece accounting function and subjects this mail to considerably less 1 scrutiny. Because of this, it is imperative that the customer's postage 2 payment system be accurate and reliable. Situations in which customers do 3 not meet the terms of their postage payment service agreements, or where 4 systems have chronic errors, cannot be simply shrugged off. These 5 situations are serious and need to be addressed. 6 Neither weight averaging or reverse manifesting, in their current form, 7 meets the accuracy and confidence level necessary to use them as the basis, 8

9 or the justification for, an alternative rate proposal.

Name of Customer and Address	U.S. Postal Service POSTAGE DUE BILL				
				Dated Postmark	
Postage due articles amounting to is attached to this and the necessar of this bill is being deducted from y	cent ry follow sheets that form a part of this bill. If you h our account. Please see that the value of the attached	: are delivered upo ive deposited a sur postage correspon	n payment of this amour n in advance for postage is with the amount state	it. Equivalent postage due mail, the amount d.	
					·····
					006
Number of Fallow Sheets to This Sign Bill	inature of Postmaster				128
PS Form 3582-A, December 1986) A	S. GOVERNMENT PRINTIN	IG OFFICE: 1994 379-315	_

USPS-RT-5, Attachment A

00040

. <

Northern Virginia Rates & Classification Service Center



- . . .

NOVEMBER 3, 1995

MR. JACK SIGMAN NASHUA PHOTO INCORPORATED 400 RAYON DRIVE PARKERSBURG WV 26101-6668

Dear Jack:

Approximately one year ago, this office granted Nashua an authorization for a Business Reply Mail return system. This system was unique and the authorization was granted under a test program to determine how such a system would perform. The purpose of this letter is to provide an analysis of the system's current performance in order that decisions can be made regarding its future.

Overall the system has met its two main goals - getting your mail to you sooner and reducing work hours at the Parkersburg post office. Due to various types of continual errors, however, the full potential of the system is not being realized. While acknowledging some recent improvements, an analysis of the postal verification samplings over the 11-day period of October 16-26 reveals there still are a significant number of errors. (See the attached sheet.) These errors have forced us to conduct daily postage samplings and until recently, almost daily postage adjustments.

Out of the 550 pieces sampled during the period, 101 pieces were involved in error of some type resulting in a 20% error rate. Overall, the errors are slightly in Nashua's favor. Normally the errors offset each other which reduces the amount or the likelihood of postage adjustments. The number of errors, however, still indicates there are significant system problems which need to be resolved.

89 of the 101 errors involve weight discrepancies. 76% of these errors involve weight differences of plus or minus 0.1 ounces from the appropriate rate category. Since the errors are both heavy and light this could indicate a problem with the predetermined weight process.

USPS-RT-5, Attachment B page 1

006129

5904 RICHMOND HWY SUITE 500 ALEXANDRIA VA 22303-2736 (703) 329-3660 FAX: (703) 329-3662 21% of the weight errors involve differences of plus or minus 0.2 ounces. The majority of these errors are in Nashua's favor. These errors could be associated with the process of indicating the existence of a film canister in the reply envelope. Additional sampling would be required to confirm this is the root cause of the 0.2 ounce errors. On the postage sampling forms we include the actual piece weight, the actual postage and the manifest postage. The screen or manifest weight is not being recorded. We have informed the Parkersburg post office to begin recording the manifest/screen weight of the sampled pieces in the "3-Digit Zip Code" column of the postage sampling worksheets. This will enable you to determine the exact difference between the actual and manifest piece weights and possible reasons for the weight discrepancies. You may also want to expand your internal quality control checks and record this information as well.

The other 12 errors involved missing pieces. Three pieces could not be located at all. Nine pieces did not have a BRM price which indicates the customer used an insert with a non-BRM media code, or the code was incorrectly entered by the operator. While these represent only about 10% of the total errors, they are significant because these types of errors will almost always result in a postage adjustment. System changes or improvements are necessary to correct this problem.

The current system represents a major improvement over the methods utilized previously to process your mail and we plan to continue to use the system. I think you will agree, however, our original intention was to work together to build a system with a much higher degree of accuracy. The success of that effort will be determined by your ability to discover the root causes of the various types of errors and take the necessary corrective actions.

We remain enthusiastic about this project and remain committed to working with you to develop it to its fullest potential. If you have any questions concerning this matter, please feel free to contact me at (703) 329-3660. I plan to call you in two to three weeks to get an update on the system.

Sincerely,

oe DeMay

Acting Manager Rates and Classification Service Center

cc: Diarmuid Dunne, District Manager Delores Cummings, Manager Customer Service Support Pam Calain, Account Representative Postmaster, Parkersburg WV

> USPS-RT-5, Attachment B page 2

88% o	Of the		Total	10/26	10/25	10/24	10/23	10/22	10/21	10/20	10/19	10/18	10/17	10/16	Date
f the tota	101 piec	(6.8%)	34	6		ω	G	-	N	2	ω	4.	ω	C	.43/.55
ll errors ;	:es (20.2	(8.2%)	41	2	7	8			ω	>	4	6	ω	сл	.55/.43
rors are due to inc 76% 21% 3%	%) in erro	(0.2%)	1												.55/1.01
incorrec 76% of th 21% of th 3% of th	r - 57% of 43% of	(1.6%)	∞		-		ω							3	.78/.55
t piece w 1e errors 1e errors 1e errors 1e errors	the erro	(0.6%)	ω					-4							.78/1.01
eights- are +/- 0. are +/- 0.2 are great	rs are in l rs are in l	(0.4%)	2	}				2							.43/.32
l ounces l ounces er than +/	Vashua's JSPS's fa	(0.6%)	ω										 		Missing
2 2	favor vor	(1.8%)	9	→			ω		2			2			No BRN
		(20.2%)	101/44	11/19	8/42	11/39	13/37	7/43	8/42	3/47	7/43	12/38	7/43	14/36	1 Totals

VIHSAN -

USPS-RT-5, Attachment B

page 3