



July 27, 2005

PRITHA N. MEHRA
MANAGER, MARKETING TECHNOLOGY AND CHANNEL
MANAGEMENT

SUBJECT: Management Advisory – Mail Evaluation,
Readability and Lookup INstrument (MERLIN)
Internal User Satisfaction Survey
(Report Number NO-MA-05-002)

This report presents the results of our self-initiated internal user satisfaction survey of MERLIN (Project Number 04YG038NO000). We will issue a global MERLIN report upon completion of the nationwide MERLIN site-specific reviews and this survey.

Results in Brief

MERLIN survey respondents generally gave MERLIN a positive rating. Respondents indicated that MERLIN has improved the quality of the mail and mailers are treated in a fair and consistent manner. They believe MERLIN provides excellent barcode readability analysis for mailings and verifies more aspects of a mailing than the previous manual process.

However, some respondents believe the process of verifying mailings is more time consuming than the previous manual process and MERLIN frequently requires maintenance to operate as designed. In addition, the survey responses showed that the training provided for MERLIN did not always cover interpreting reports or verifying mailings. [REDACTED]

This survey is a feedback mechanism Postal Service managers can use to monitor and improve MERLIN internal user satisfaction. In addition, we are presenting survey responses for informational purposes only and, therefore, are making no recommendations.

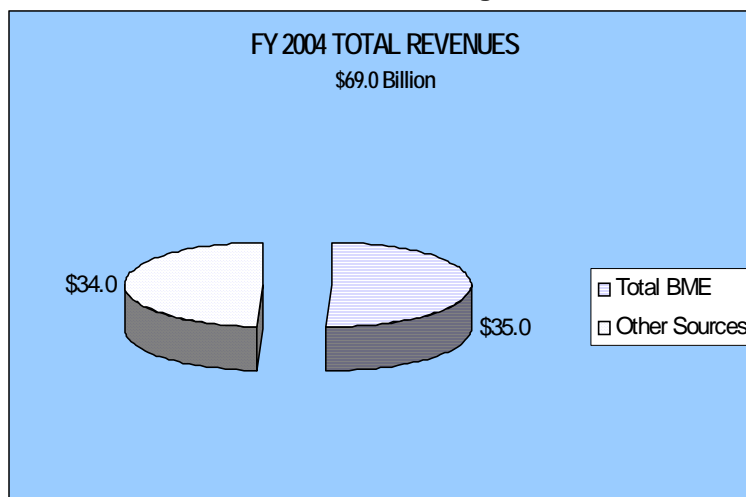


Background

The Postal Service accepts and verifies business mailings through approximately 2,000 entry units nationwide that administer mailer permits and accept bulk business mail. These consist of business mail entry units (BMEUs) located at Postal Service facilities and detached mail units (DMUs) located at mailers' facilities and staffed by Postal Service employees.

At least 70 percent of the 206.1 billion mailpieces the Postal Service handled in fiscal year (FY) 2004 entered the mailstream through BMEUs. As shown in the chart below, business mailers accounted for about \$35 billion (51 percent) of the Postal Service's FY 2004 revenue.¹

Business Mail Revenue as Percentage of Total Revenues



The Postal Service discounts its postage rates for business mailers in exchange for preparing, barcoding, or sorting

¹The [Postal Service's 2004 Annual Report](#) and WebEIS.

their mail before delivering it to the Postal Service. The Postal Service bases these discounts on the estimated costs it avoids when mailers do work that their employees would otherwise perform. To verify that a mailing deserves the worksharing discounts claimed, the Postal Service verifies the quality of mail preparation, including the accuracy of size, weight, and piece count information.

The MERLIN machine replaces most manual verifications of all large MERLIN-compatible mailings and regular periodic verification of small mailings.² Operationally, MERLIN machines determine whether individual mailings qualify for the discounts claimed by the mailer. The Postal Service has [REDACTED] [REDACTED] deployed 1,203 machines³ to approximately 400 BMEUs and DMUs nationwide.

Illustration 1: MERLIN



From September 2004 to March 2005, the Office of Inspector General (OIG) conducted eight site-specific reviews of MERLIN to determine whether BMEUs and associated DMUs were fully using MERLIN machines to verify business mailings and whether clerks were collecting additional revenue assessed by MERLIN. Some BMEU employees interviewed during these reviews indicated that MERLIN has not improved the quality of the mail and mailers are not always treated in a fair and consistent

²The Postal Service defines “large mailings” as those with 10,000 pieces or more and “small mailings” as those with fewer than 10,000 pieces. A MERLIN-compatible mailpiece meets the MERLIN weight and size restrictions. Mailings not compatible with MERLIN include parcels, newspapers, irregular Periodicals, international mail, and individual pieces that exceed MERLIN weight and size restrictions. Polywrap or shrink-wrapped pieces may not be excluded simply because they are wrapped.

³MERLIN Decision Analysis Reports Phases I and II, dated May 2000 and June 2001, respectively.

manner. In order to determine if these issues existed nationwide, as well as assess overall user satisfaction with MERLIN, we decided to conduct a survey.

Objective, Scope, and Methodology

Our objective was to assess internal user satisfaction with MERLIN through a user satisfaction survey focusing on the usefulness and accuracy of MERLIN.

We randomly surveyed 132 BMEUs that use MERLIN. The survey covered all Postal Service areas and 64 of the 80 Postal Service districts. We mailed surveys on December 13, 2004 (see Appendix A for details of the sample selection methodology). We asked survey participants to voluntarily complete a confidential ten-question survey regarding their satisfaction with MERLIN. Survey responses were analyzed and summarized and the survey response rate is documented below:

MERLIN SURVEY			
BMEU Personnel	Sent Out	Received	Response Rate
Managers	64	55	86%
Supervisors	77	53	69%
Clerks and Technicians	1,161	662	57%
Totals	1,302	770	59%

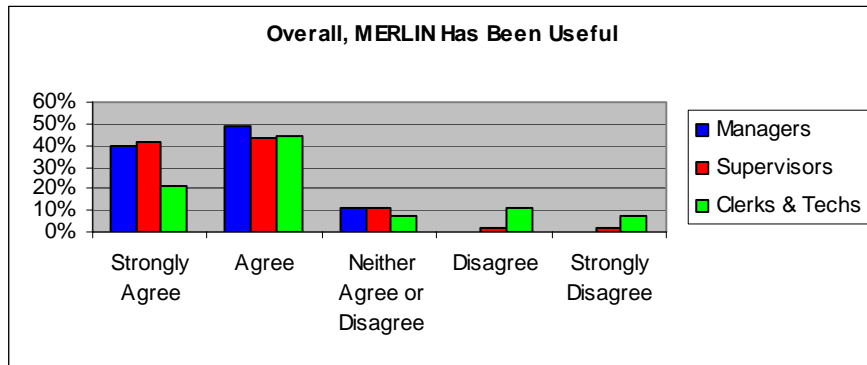
We conducted this review in cooperation with the Postal Service from September 2004 through July 2005, in accordance with the President's Council on Integrity and Efficiency, Quality Standards for Inspections. We discussed our conclusions with appropriate management officials and included their comments where appropriate.

Prior Audit Coverage

From calendar years 2000 to 2005, the OIG conducted 11 reviews of MERLIN. The Government Accountability Office conducted three reviews addressing business mail verifications and Postal Service worksharing. For details on prior audit coverage, see Appendix B.

Overall, MERLIN is Useful for Acceptance and Verification of Mailings

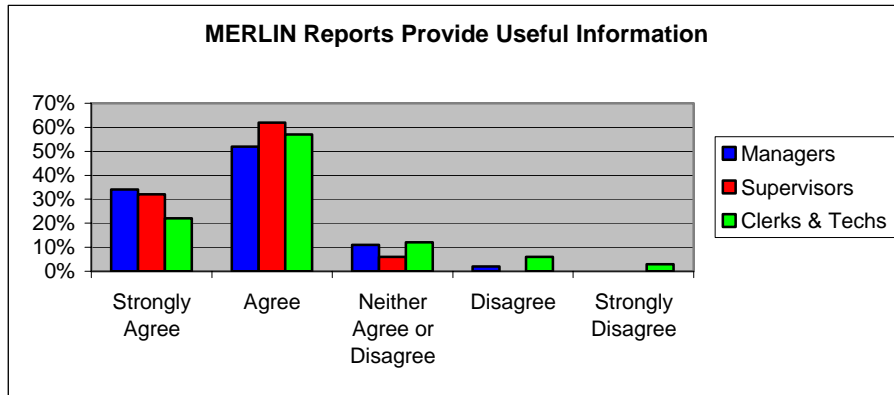
Over sixty-eight percent of the survey respondents either strongly agree or agree that MERLIN is useful for acceptance and verification of mailings. A summary of the most frequent comments can be found in Appendix C.



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	22	22	137	181	23.8%
Agree	27	23	291	341	44.8%
Neither Agree or Disagree	6	6	111	123	16.1%
Disagree	0	1	70	71	9.3%
Strongly Disagree	0	1	45	46	6.0%
Totals	55	53	654	762	100.0%

MERLIN Reports are Useful

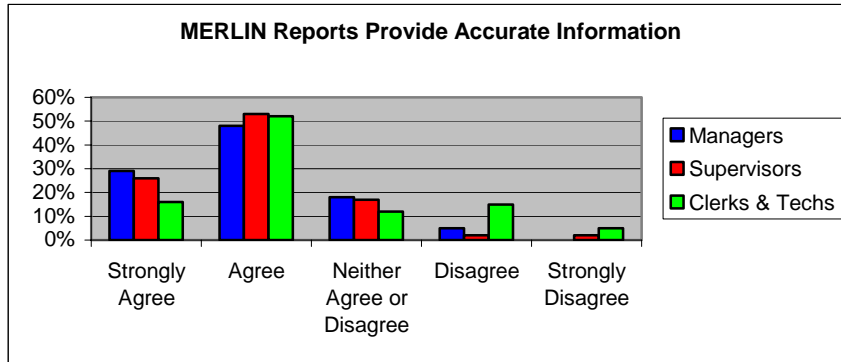
Nearly 81 percent of the survey respondents either strongly agree or agree that MERLIN reports provide useful information.



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	19	17	142	178	23.5%
Agree	29	33	373	435	57.4%
Neither Agree or Disagree	6	3	76	85	11.2%
Disagree	1	0	40	41	5.4%
Strongly Disagree	0	0	19	19	2.5%
Totals	55	53	650	758	100.0%

MERLIN Reports are Accurate

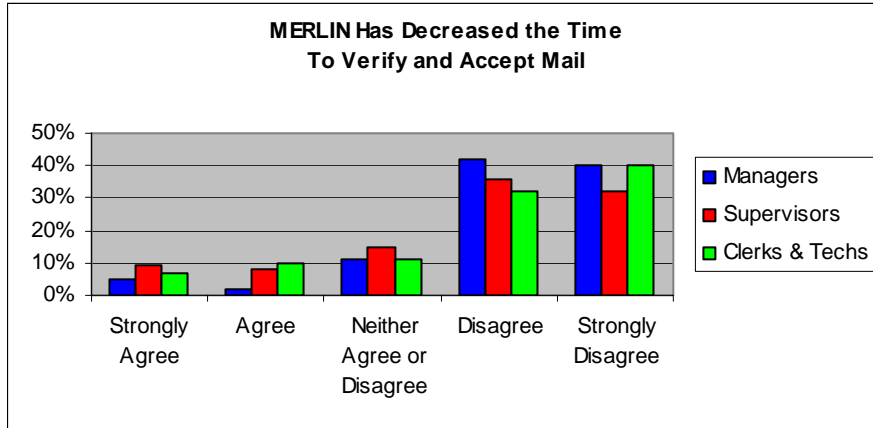
Sixty-eight percent of the survey respondents either strongly agree or agree that MERLIN reports provide accurate information.



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	16	14	106	136	18.0%
Agree	26	28	328	382	50.5%
Neither Agree or Disagree	10	9	80	99	13.1%
Disagree	3	1	99	103	13.6%
Strongly Disagree	0	1	35	36	4.8%
Totals	55	53	648	756	100.0%

**MERLIN has not
Decreased the Time
to Verify and Accept
Mail**

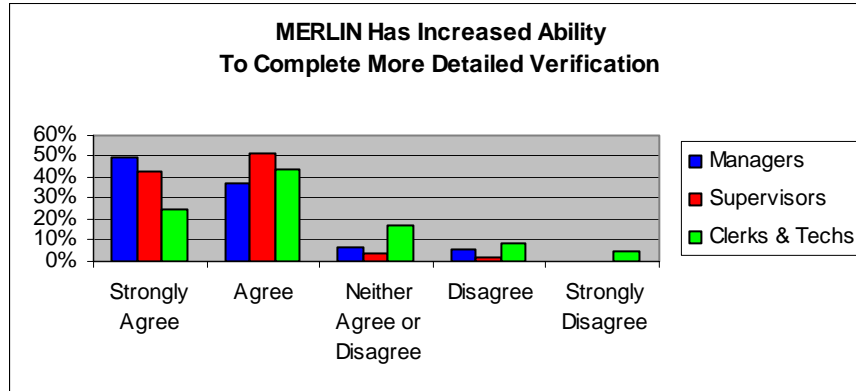
Over 71 percent of the survey respondents either strongly disagree or disagree that MERLIN has decreased the time it takes to verify and accept mail.



Breakout of Responses					
	<u>Managers</u>	<u>Supervisors</u>	<u>Clerks and Techs</u>	<u>Totals</u>	<u>Percentage</u>
Strongly Agree	3	5	47	55	7.2%
Agree	1	4	68	73	9.6%
Neither Agree or Disagree	6	8	74	88	11.5%
Disagree	23	19	211	253	33.2%
Strongly Disagree	22	17	254	293	38.5%
Totals	55	53	654	762	100.0%

MERLIN has Increased Ability to Complete More Detailed Verifications

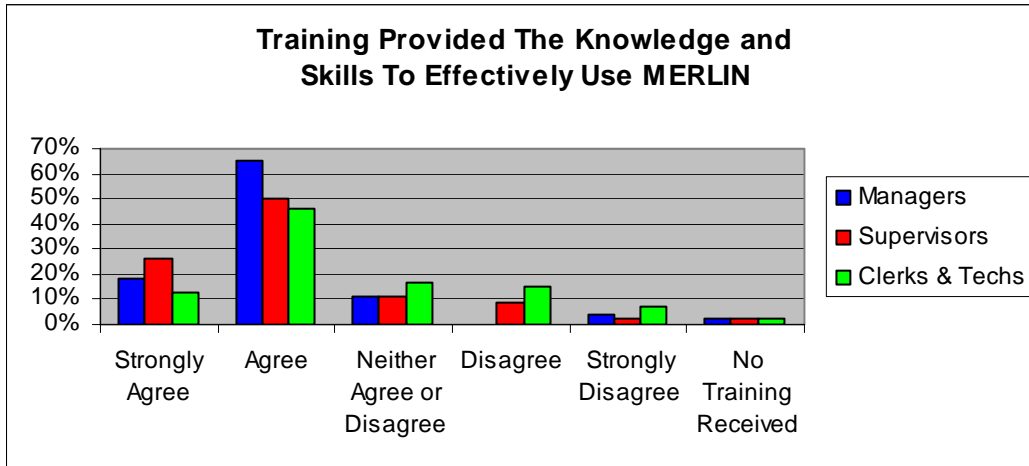
Sixty-eight percent of the survey respondents either strongly agree or agree that MERLIN has increased their ability to complete more detailed verifications when compared with the previous manual process.



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	16	14	106	136	18.0%
Agree	26	28	328	382	50.5%
Neither Agree or Disagree	10	9	80	99	13.1%
Disagree	3	1	99	103	13.6%
Strongly Disagree	0	1	35	36	4.8%
Totals	55	53	648	756	100.0%

MERLIN Training was Sufficient

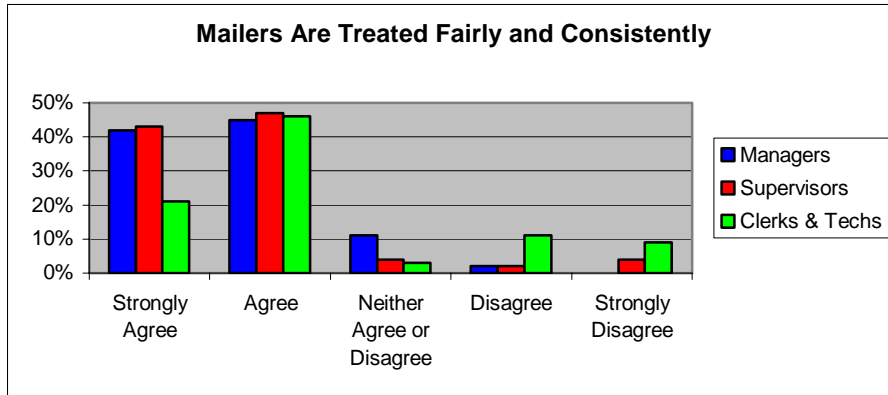
Sixty-two percent of the survey respondents either strongly agree or agree that training provided the knowledge and skills necessary to use MERLIN.



Breakout of Responses					
	<u>Managers</u>	<u>Supervisors</u>	<u>Clerks and Techs</u>	<u>Totals</u>	<u>Percentage</u>
Strongly Agree	10	14	83	107	14.1%
Agree	36	26	303	365	48.2%
Neither Agree or Disagree	6	6	109	121	16.0%
Disagree	2	5	100	107	14.1%
Strongly Disagree	0	1	43	44	5.8%
Never Received Training	1	1	12	14	1.8%
Totals	55	53	650	758	100.0%

Mailers are Treated Fairly and Consistently

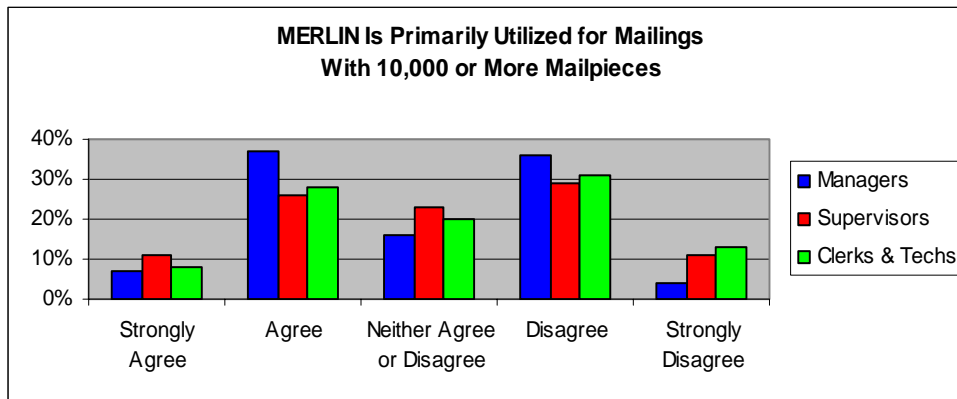
Seventy percent of the survey respondents either strongly agree or agree that mailers are treated fairly and consistently;



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	23	23	135	181	23.8%
Agree	25	25	305	355	46.6%
Neither Agree or Disagree	6	2	83	91	12.0%
Disagree	1	1	71	73	9.6%
Strongly Disagree	0	2	59	61	8.0%
Totals	55	53	653	761	100.0%

MERLIN Usage Varies

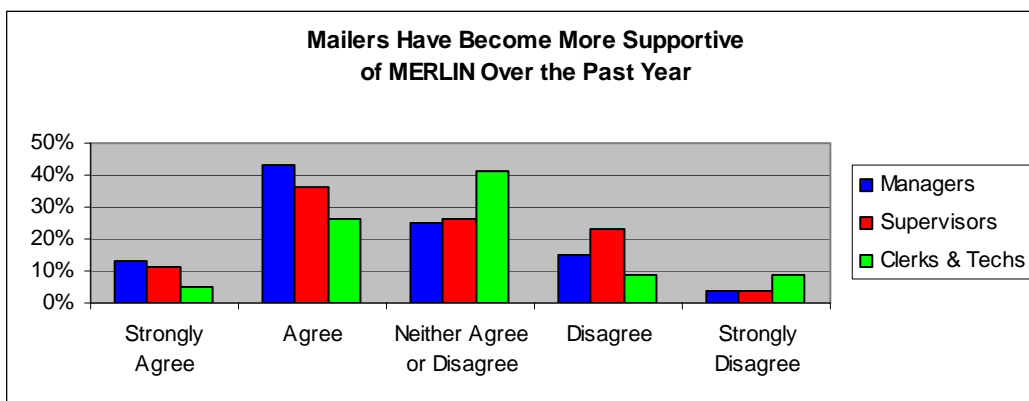
Responses from MERLIN users regarding MERLIN use were mixed. Over 36 percent of survey respondents believed that MERLIN is primarily used for large mailings while nearly 44 percent of respondents indicated that MERLIN is used according to usage requirements.



Breakout of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	4	6	52	62	8.2%
Agree	20	14	181	215	28.4%
Neither Agree or Disagree	9	12	127	148	19.6%
Disagree	20	15	207	242	32.0%
Strongly Disagree	2	6	81	89	11.8%
Totals	55	53	648	756	100.0%

Mailers' Support of MERLIN is Mixed

Responses from MERLIN users regarding mailers' support of MERLIN were also mixed. Although 34 percent of survey respondents indicate they believe that mailers are more supportive of MERLIN over the past year, 27 percent either strongly disagree or disagree with this assertion.



Breakdown of Responses					
	Managers	Supervisors	Clerks and Techs	Totals	Percentage
Strongly Agree	7	6	32	45	6.0%
Agree	24	19	171	214	28.3%
Neither Agree or Disagree	14	14	263	291	38.5%
Disagree	8	12	126	146	19.3%
Strongly Disagree	2	2	56	60	7.9%
Totals	55	53	648	756	100.0%

**Suggestions for
MERLIN
Improvements**

We asked BMEU managers, supervisors, clerks, and technicians to provide suggestions on how to improve MERLIN. The following is a list of the most common suggestions:

- Provide more frequent software updates (the newest addresses) on MERLIN.
- Stop running flats on MERLIN since they jam and require at least two clerks to process.
- Assign mechanics to work MERLIN on a full-time basis.
- Improve MERLIN's ability to run and analyze mailings faster.
- Improve MERLIN's feeder mechanism.
- Improve accuracy reading on piece weight and postage meters.
- Have MERLIN linked to PostalOne!

We appreciate the cooperation and courtesies provided by your staff during the survey. If you have any questions, or need additional information, please contact Robert J. Batta, Director, Network Operations – Processing, or me at (703) 248-2300.

/s/ Mary W. Demory

Mary W. Demory
Deputy Assistant Inspector General
for Core Operations

Attachments

cc: Anita J. Bizzotto
Susan M. Plonkey
Robert J. Dvonch
Steven R. Phelps

APPENDIX A. STATISTICAL SAMPLING

Purpose of the Sampling

One of the objectives of this survey was to assess various aspects of user satisfaction and perception of MERLIN utility and effectiveness. In support of this objective, we employed a cluster random sample based on MERLIN sites. We designed the sample to allow statistical projection of the overall response to various questions and to allow identification of sites where responses were noticeably less favorable than others.

Definition of the Survey Universe

The survey universe consists of 399 BMEUs with at least one MERLIN installed as of November 17, 2003. We obtained the universe from the Postal Service's Customer Service Support department. We also determined the number of clerks/technicians at each site, using information in the Employee Master Files database and updating it as much as possible through conversations with BMEU personnel.

Sample Design and Modifications

We based the sample size of 132 sites on a simple random selection of sites with the expectation that many sites would have only one manager and that each district would have only one representative. We believed that this approach would provide a more than adequate sample of clerks as we expected there would be several clerks at each location selected. We also knew that we wanted to have sites from as many Postal Service districts as feasible—within audit resource constraints—to achieve a sense of audit “coverage.” Therefore, we did not reduce the number of sites to reflect the likelihood of multiple clerk responses from a single site. We calculated the sample size for a two-sided confidence interval at the 95 percent confidence level and +/- 7 percent precision.

We made all selections for inclusion in the sample by using the “randbetween” function in Microsoft Excel to assign random numbers to the items on the universe listing.

Results

There was a 31 and 43 percent non-response rate for the supervisor and clerk/technician categories, respectively. We did not attempt any follow-up of non-responses. For these reasons, we chose not to project the results. The results reported are the totals for the actual respondents; we neither intend nor imply any projection to the audit universe.

APPENDIX B. PRIOR AUDIT COVERAGE

The OIG conducted 11 reviews regarding MERLIN from July 2000 to March 2005.

Mail Evaluation, Readability, and Lookup Instrument: Proof of Concept (Report Number DA-AR-00-003, dated July 31, 2000). The audit reported that MERLIN performance during the proof of concept test demonstrated potential as a valuable tool for verifying and accepting business mail. However, the Postal Service needed to improve performance in the areas of weight measurement accuracy, indicia recognition, and address recognition and evaluation.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[Redacted text block]

[REDACTED]

[REDACTED]

[REDACTED]

The GAO conducted three reviews addressing business mail acceptance and Postal Service worksharing.

U.S. Postal Service: Stronger Mail Acceptance Controls Could Help Prevent Revenue Losses (Report Number GAO/GGD-96-126, dated June 25, 1996). The audit objective was to determine whether internal controls for accepting bulk business mailings reasonably assured that the Postal Service granted discounts claimed by mailers only when the mailers earned the discounts. The audit reported that business mail verifications did not comply with Postal Service requirements. In addition, mailers could resubmit rejected mailings and have them accepted without correcting the errors or paying additional postage; acceptance clerks did not have the special equipment needed to determine whether barcodes applied by mailers met the Postal Service's technical standards; and supervisory reviews and follow-up verifications often were not done or not reported. Finally, the Postal Service did not have a mechanism for identifying how much it cost them to accept improperly prepared mailings.

The Postal Service concurred with the findings and stated that initiatives underway would address the report's recommendations. These initiatives included testing and deploying 260 Automated Barcode Evaluators and 187 Barcoding, Addressing, Readability Quality Utilizing Electronic Systems Technology units to help acceptance clerks evaluate barcoded mailpieces.

U.S. Postal Service: Changes Made to Improve Acceptance Controls for Business Mail (Report Number GAO/GGD-00-31, dated November 9, 1999). The audit reported that

the Postal Service had made changes similar to those GAO recommended in its June 1996 report (see above) and that controls had improved overall. However, the Postal Service lacked comprehensive information about how well its business mail controls were working and could not ensure it was collecting all revenues due from business mail operations. In addition, the Postal Inspection Service found that some units were not doing required presort verifications⁴ and employees at some units needed additional training.

U.S. Postal Service: A Primer on Postal Worksharing (Report Number GAO-03-927, dated July 31, 2003). This is an informational report addressing what key activities are included in Postal Service worksharing, the rationale for worksharing, and the legal basis for establishing worksharing rates.

⁴ GAO based their results on a random sample of 54 Postal Inspection Service audit reports from a universe of 183 reports issued from August 1998 to June 1999.

APPENDIX C. SUMMARY OF THE MOST FREQUENT COMMENTS FROM SURVEY RESPONDENTS

MERLIN survey respondents were given the opportunity to state why they chose a particular answer for each question. The purpose of analyzing these comments was to determine whether they support answers given to survey questions and to identify any systemic issues with MERLIN. Survey respondent comments were not substantiated and are only presented for informational purposes.

The following is a summary of the most frequent comments received from MERLIN survey respondents per question:

Overall, MERLIN has been useful for mail acceptance and verification.

Respondents agree that MERLIN has been an improvement to the acceptance and verification process. Generally, respondents believe that MERLIN eliminates the subjectivity of verifying mail and reads barcodes extremely well. However, some survey respondents stated that the process of verifying mailings is time consuming and MERLIN frequently requires maintenance to operate as designed.

MERLIN reports provide useful information.

Comments support that barcode readability and presort features are functioning as intended and MERLIN reports are useful for assisting mailers with improving the quality of their mail. However, some survey respondents indicated that the address recognition report is not always accurate because the software tables that provide the latest addresses are not updated in a timely manner.

MERLIN reports provide accurate information in determining whether mailings qualify for discounts claimed.

Respondents' comments indicate that MERLIN reports can be used to verify claimed discounts; however, accuracy varies because of design flaws or features that are not utilized. In addition, some survey respondents stated that the short paid meter, piece count recognition, and weight reports are not always reliable because MERLIN's feeder mechanism jams.

MERLIN has decreased the time required to complete mail acceptance and verification.

Respondents' comments indicate that MERLIN has not decreased the time to process mailings. Specifically, some respondents indicate that MERLIN requires additional preparation time, the sample size to verify mail is too large, and processing flats is time consuming.

[REDACTED]

MERLIN has increased the Postal Service's ability to complete more detailed verification compared to the previous manual system.

Respondents' comments indicate that MERLIN, when operating as designed, has increased the Postal Service's ability to complete more detailed verifications. Specifically, survey respondents stated that MERLIN verifies more aspects of a mailing than the previous manual process and is excellent for reading barcodes.

Training provided the knowledge and skills to effectively use MERLIN machines.

Respondents' comments indicate the training provided the knowledge and skills to effectively use MERLIN machines. Classroom training provided a foundation for understanding MERLIN's different components; however, some survey respondents indicated that training did not always adequately cover interpreting reports or verifying mailings. In addition, some survey respondents stated that on-the-job training provided a more in-depth working knowledge of MERLIN. Furthermore, some survey respondents stated they needed to be offered training for any updates to MERLIN.

Mailers are treated fairly/consistently with MERLIN.

[REDACTED]


Facilities primarily use MERLIN machines for the acceptance and verification of mailings of 10,000 pieces or more.

Respondents' comments show they are aware of the usage requirements for large and small mailings; however they are actually processing more small mailings to increase their BMEU's processing numbers. In addition, smaller mailings are processed more often because a particular facility may not accept many large mailings.

Mailers have become more supportive of MERLIN over the past year.

Respondents' comments indicate that mailers accept MERLIN as a part of the verification process; [REDACTED]

[REDACTED]

 Some respondents also indicated that mailers have concerns regarding the additional time it takes to verify their mail.

APPENDIX D. MANAGEMENT'S COMMENTS

BUSINESS MAIL ACCEPTANCE



July 1, 2005

Kim Stroud
Director, Audit Reporting
Office of Inspector General

SUBJECT: Response to Draft Management Advisory – Mail Evaluation
Readability Lookup Instrument (MERLIN) Internal User Satisfaction Survey
(Report Number NO-MA-5-Draft)

I have reviewed the subject draft report and have had the opportunity to provide responses to the initial discussion draft. I appreciate the OIG incorporating my comments into this draft management advisory report.

I request that the results of the survey and the total investment figure for MERLIN not be disclosed as we have not previously released this information and believe that this information is proprietary.

I have no further comments on this report.


for Pritha Mehra
Manager, Marketing Technology and Channel Management

Cc: Maria Maddocks, Corporate Audit and Response Management

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