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Inspector General

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July 18, 2016

Mr. Wael Hibri
Senior Director
MTA Business Service Center
333 W. 34th Street
New York, NY 10001

**Re: Accuracy of Metro-North and Long
Island Railroads' Laptop Inventory
Records
MTA/OIG #2016-08**

Dear Mr. Hibri:

In 2015, the Office of the MTA Inspector General (OIG) investigated and sustained an allegation that a Metro-North Railroad (MNR) Information Technology (IT) employee had removed five MNR laptop computers from MTA property to his home without authorization. Based on our findings, we recommended that the employee be disciplined (MTA/OIG #2015-21). Subsequent to the MTA initiation of disciplinary action, the employee elected to resign from his employment with the MTA. Further, having preliminarily identified some potentially systemic recordkeeping issues with MNR laptop inventory, we believed a more comprehensive review of inventory controls would be appropriate.

Laptops are both portable and easy to conceal, making them high risk items for loss and theft. Additionally, laptops may contain sensitive, proprietary, and confidential data about the MTA's operations, its customers and/or employees, thereby raising privacy and additional security concerns. As such, laptops must be properly safeguarded and accounted for at all times. Given the seriousness of these issues, along with our disciplinary findings and identification of potentially systemic issues at MNR, as well as our concern that similar problems may exist at the Long Island Rail Road (LIRR), we initiated an audit of both MNR and LIRR laptop inventory records.

BACKGROUND

Prior to the creation of one unified MTA Information Technology Department (MTA IT) in January 2015, each MTA operating agency's IT Department was responsible for maintaining an inventory of its own IT assets, which MNR and LIRR did by utilizing commercially-available IT inventory management software. Upon acquiring laptops, the agencies followed similar

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procedures. Specifically, each affixed an identifying asset tag to each device, recorded it in their respective IT inventory management system, and upon assignment of each laptop, an agency IT specialist installed the necessary security, anti-virus, and any productivity software required by the user. As to such assignment, however, LIRR and MNR employed different procedures.

At LIRR, responsibility for each laptop was assigned to an individual employee. Each laptop was then classified into one of three categories based on how, where, and by whom the laptop was to be used. "Installed" laptops were assigned to and used by individual employees in the performance of their duties; "Pooled" and "Tooled" laptops were assigned to individual employees for the purpose of accountability, but could be used by many different employees for various functions, such as training or as a field diagnostic tool.

At MNR, each laptop was issued to either an individual employee or to a location or department. For those laptops assigned to a location or department, MNR records did not identify a specific employee as having responsibility for that device.

In conducting our audit, we obtained inventory records for MNR dated August 2015 and for LIRR dated October 2015, which listed 663 and 1,039 laptops respectively. To test the accuracy of the railroads' documentation, we randomly selected a sample of laptops to verify their assignment to the employees and/or locations as documented in the inventory records. In total, we examined the records for a total of 199 laptops: 129 assigned to 16 LIRR employees and 70 assigned to 41 MNR employees or work locations. This total represents over 11 percent of the combined laptop inventory of LIRR and MNR. As discussed below, we found numerous discrepancies in the agencies' laptop inventory records that require corrective action.

FINDINGS

To match the laptops themselves with the corresponding LIRR and MNR inventory records, we visited employees' work locations or obtained photographic evidence of the equipment from the employees to confirm the equipment model, manufacturer's serial/service tag numbers, and/or the agency's asset tags. Overall, we were able to verify the accuracy of the inventory records for only 140 (70%) of the sampled laptops. The inventory records contained inaccurate information for the remaining 59 (30%) laptops. Specifically:

- We could not find 44 of the 59 laptops at the locations and/or with the employees listed on the inventory records. In some instances, employees who were supposedly assigned a laptop claimed to have no knowledge of that assignment, or claimed to have previously returned the equipment and were able to provide us with records evidencing the returns. In other cases, employees told us they possessed a laptop that inventory records listed as being in the possession of a different employee.

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- We also identified 8 laptops still documented as assigned to five MNR employees even though their employment with MNR ended prior to the date that OIG requested the records. Ultimately, OIG auditors found these computers in the possession of other MNR employees.
- Lastly, at MNR, we could not verify the existence of 7 laptops listed in inventory records only as assigned to work locations with, as noted above, no specific employees identified as having responsibility for them.

Aside from the issues discussed above regarding the sampled laptops, we were troubled to find that agency employees reported they were in possession of 14 laptops that did not appear anywhere on the inventory records. The absence of this equipment from the inventory makes it difficult, if not impossible, to track the laptops and protect their contents.

In our view, most of the above discrepancies in the inventory records likely occurred because LIRR and MNR did not have a system of internal controls in place to periodically verify and update the status of the laptops after their issuance. The agencies' former IT departments apparently relied on a requirement that the users or their managers notify IT of any changes in the assignments of the laptops. Indeed, MTA IT informed us that the LIRR IT previously required such changes to be reported using the Asset Relocation Form (PC-02). For its part, though, MNR had not had an official reporting form, but accepted email and phone notification. Upon consolidation, MTA IT adopted the LIRR requirement and form for all agencies to follow. However, according to MTA IT personnel interviewed, agency users and managers did not comply with this requirement and used this form only infrequently, meaning that MTA IT often became aware of a change only when the current user of the laptop, who was not the user of record, contacted MTA IT for support. When this happened, MTA IT personnel would then be able to update the inventory records with the new user information.

Even when the information regarding user changes is provided, it is not clear that MTA IT always updates its inventory records. For example, in responding to our inquiry, a LIRR Assistant Director of Training, who is assigned responsibility for 57 training laptops, provided us with records claiming that 21 of the laptops were either returned to MTA IT or were never in his possession. However, MTA IT inventory records still listed these 21 laptops as assigned to the Assistant Director.

Although the consolidation of the agencies' IT departments into one MTA IT was mostly completed at the initiation of this audit, MTA IT is still in the process of migrating the individual agencies' IT hardware inventory records into one MTA-wide inventory database. MTA IT management explained that each agency IT hardware inventory contained much of the same type of data. However, the data was captured and maintained in different fields or categories and would require extensive manual editing of the records to achieve consistency with and conformity to the new database format.

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Given the large amount of data involved, MTA IT's plan is to integrate only active computing hardware (e.g., laptops, desktops, servers, monitors, printers, etc.) into the new inventory database, leaving out items currently listed as inactive/disposed, as well as non-computing items such as televisions or fax machines. Additionally, MTA IT management is now aware that the LIRR and MNR laptop inventory records contained inaccurate information and, according to the MTA IT official responsible for IT asset management, identifying and correcting the discrepancies could be costly and may delay the implementation of the new inventory database. However, as a part of the consolidation of the IT operations, management has recognized the need to identify and correct the discrepancies in the inventory records and to ensure they remain accurate. As such, MTA IT management informed us in February 2016 that a preliminary plan has been initiated to retain the service of a consultant to perform a complete physical inventory of all agencies' computing devices and bring their inventory records up-to-date prior to consolidating them into one inventory database.

RECOMMENDATIONS

Maintaining accurate inventory records of computer equipment provides the agency with information about the users and whereabouts of these assets, which ensures more timely identification of missing equipment and increases the chances of recovery. This OIG audit determined that MTA IT currently does not possess accurate inventory records for laptops as evidenced by our findings that (1) as to nearly 30% of the sample laptops, the inventory records were an unreliable source for locating them; and (2) 14 laptops possessed by MNR and/or LIRR employees did not appear at all in the inventory records.

MTA IT management agreed with OIG assessment of the condition of the IT inventory records and the need to ensure their accuracy. Accordingly, OIG makes the following recommendations:

- 1) MTA IT should proceed expeditiously to retain its consultant to perform a complete physical inventory of all agencies' computing devices and bring their inventory records up-to-date prior to consolidating them into one inventory database.
- 2) Once its consolidation process is complete and its records are up-to-date, MTA IT should establish internal controls to verify the accuracy of its records on an ongoing basis. At the minimum, a random sample of equipment and inventory records should be regularly selected for testing to ensure that each one is properly matched with the other.
- 3) Going forward, MTA IT should assign laptops only to accountable employees rather than to a work location.

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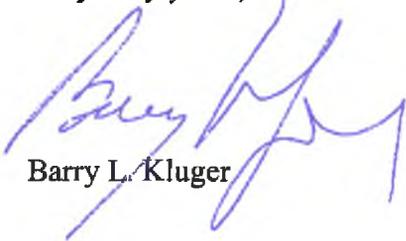
Agency Response

Following our submission to you of our preliminary report containing the above Findings and Recommendations, you provided the agency response in a letter dated June 13, 2016. The letter explained that the MTA Business Service Center is in agreement with the OIG on the need to safeguard MTA's IT assets, and accepts our recommendations. Specifically, you detailed the following actions that have been taken or will be taken soon to improve internal controls over IT assets:

- *Two separate physical inventory counts – one for desk-top devices and one for mobile devices are scheduled to take place during the period from September 2016 to February 2017.*
- *The new asset management system will allow physical locations of desktop devices to be verified whenever they are connected to the network.*
- *IT staff will have the ability to update the asset management system records in real time through a phone app.*
- *Random spot checks of IT assets will also be conducted periodically. For laptops and tablets, annual recertification with a full physical inventory will be performed.*
- *Each mobile device will be assigned to an individual staff member. In a few cases where business need requires it, pooled devices will be assigned to a designated staff member who will be accountable for all the assigned devices.*

We appreciate your attention to the issues we raised, as well as the courtesy and cooperation afforded to us at all times by your staff. Should you have any questions regarding this final report, please contact me or Executive Deputy Inspector General Elizabeth Keating at (212) 878-0022.

Very truly yours,



Barry L. Kluger

cc: Joseph Giuletti
Patrick Nowakowski
Donna Evans
Sidney Gellineau