



Department of Public Safety

OSHP Stockroom Inventory Audit

Audit Period: July 2016 through March 2017

Results Summary:

Objective	Conclusion*
Stockroom Inventory Control	Improvement Needed

* Please refer to Appendix A for classification of audit objective conclusions.



Executive Summary

Background

The fiscal year 2017 transportation and main operating budgets appropriate a total of \$688.6 million to the Department of Public Safety, which includes the Ohio State Highway Patrol (OSHP). Funding for the OSHP is solely appropriated through the transportation budget to support the Patrol's highway and non-highway law enforcement programs. For FY 2017, \$317 million had been appropriated to OSHP programs, which ultimately represents 46.1% of the Department's annual budget.

The OSHP maintains a stockroom in Columbus to have non-uniform items such as drug tests, flashlights, stop sticks, etc. on hand for quick distribution to district and local patrol posts. These are items essential for officers to conduct their assigned duties.

Additionally, DPS is in the development stages of implementing a new inventory management system to replace their asset inventory management system (AIMS). The OSHP stockroom items are currently ordered and inventoried in AIMS, and will be transitioning to the new system once implemented.

During the audit, OIA identified opportunities for DPS to strengthen internal controls and improve business operations. OIA conforms to the *International Standards for the Professional Practice of Internal Auditing*. OIA would like to thank DPS staff and management for their cooperation and time in support of this audit.

This report is solely intended for the information and use of agency management and the State Audit Committee. It is not intended for anyone other than these specified parties.

Scope and Objectives

OIA staff was engaged to perform assurance work related to the OSHP Stockroom Inventory process. This work was completed between April and June 2017. The scope of this audit was limited to the processes and applications used to manage the OSHP stockroom inventory. The audit objective was to evaluate the design and effectiveness of controls over the stockroom inventory control processes including: ordering and receiving, distributing, tracking, and reporting.

Detailed Observations and Recommendations

The Observations and Recommendations include only those risks which were deemed high or moderate. Low risk observations are discussed with individual agency management and are not part of this report. However, there were no low risk observations noted during this engagement.



Observation 1 – Inadequate Inventory Management Procedures

Inventory management is the practice of overseeing and controlling inventory throughout the functions in the inventory and warehousing cycle. To manage inventory properly throughout the ongoing process, adequate internal controls should be established to ensure critical processes are operating effectively.

Currently, the stockroom inventory process utilizes the Asset Inventory Management System (AIMS) for tracking stockroom inventory, placing District/Post orders, and generating reports. The various reporting from AIMS is not user friendly and therefore does not get utilized as it should throughout the process. There are areas for improvement in the stockroom inventory process, as well as with the utilization of AIMS. As a result, the Ohio State Highway Patrol (OSHP) is implementing a new system, the Inventory and Receiving Management System (IRMS), as a replacement of AIMS. IRMS will be able to make the process more efficient by providing upgraded features, reducing manual processes, as well as merging multiple systems into one comprehensive system. IRMS is expected to be implemented by the end of calendar year 2017.

A review of the current stockroom process revealed control weaknesses, noted below, which should be evaluated by OSHP within the current AIMS system and going forward, when implementing the new IRMS system.

Segregation of Duties

Adequate internal controls includes establishing segregation of duties throughout the inventory process to prevent asset misappropriation or financial misstatement. Incompatible duties may include: custody of assets; authorization or approval of transactions affecting those assets; and recording or reporting related to those transactions. Specifically, no one person should be able to authorize a transaction (e.g., a purchase or sale), receive inventory, record the transaction, have custody of the inventory, distribute the inventory and perform the related reconciliations. At a minimum, there should be management oversight of any process where segregation of duties is not possible due to resource constraints or other business situations.

Due to the extended absence of key stockroom personnel, resulting in abnormally low staffing levels, the Program Administrator (PA) is performing all of the inventory duties without appropriate management oversight. Typically the PA is responsible for performing the management review, however, these duties were not passed along to the PA's manager to complete until adequate staffing levels were reestablished. Currently, the PA approves purchase requests, receives orders from vendor, manually inputs inventory into AIMS, stocks inventory, picks orders received from districts/posts, performs physical inventory count and updates/adjusts the counts within AIMS. Mitigating controls, such as an independent or supervisor review of these incompatible duties completed by the PA during this period, were not identified.

The lack of adequate segregation of duties increases the risk of inventory misappropriation, inaccurate inventory records, and incorrect or incomplete order fulfillment.



Supervisory Review

An adequate internal control environment includes establishing supervisory reviews to provide assurance that procedures are completed accurately, timely, and consistently. Standardized reviews should be designed to identify incomplete or inaccurate information. Evidence of these reviews should be logged or documented to maintain integrity of the review(s) performed.

Currently, the PA is completing critical functions within the inventory process without appropriate review and approval of a supervisor, due in part to the lower than normal staffing levels.

Specifically, there is no independent supervisor review or approval process in place to ensure the completeness and accuracy of:

- New stock purchase order requests,
- Fulfillment of district/post orders,
- Physical inventory counts, and
- Adjustments to inventory levels.

The lack of supervisory reviews could result in undetected errors, as well as increases the risk of inaccurate or inappropriate purchasing or adjustments being made to stock on hand.

Methodology to Ensure Adequate Inventory Levels

The ABC analysis method is an inventory categorization technique which divides an inventory into three categories (A, B, C) based on their estimated value/importance to an organization's operations.

Per the OSHP Tailor Shop/Stockroom Operations Manual revised December 2016, the ABC method is utilized to help determine a reasonable level of safety stock for each item. However, the ABC analysis method, as it is being applied in the Stockroom, is not formally documented or defined to identify which inventory items belong in each category. Defining the categories and the inventory items that fall within each category would allow the PA and staff to focus the majority of their ordering attention on the most critical and/or routinely requested inventory items. In addition, the overall ordering process relies on the institutional knowledge of the PA who can adjust inventory min/max levels, as deemed appropriate, based on the current needs of the districts and posts.

Currently the AIMS system does not have the ability to automatically alert management or the purchasing unit when an inventory item falls below the established minimum level to indicate when an item needs re-ordered. Generally, the PA uses the past three months order history to determine when she needs to place an order. Although there is the capability to analyze the historical orders placed by the districts/posts to aid in establishing min/max levels, there is not an established procedure in place to review order activity/trends on a routine basis. Doing so would help to forecast anticipated increases/decreases in usage of items, and associated adjustments to the min/max levels. The culmination of staffing, the lack of a defined ABC methodology, and ad-hoc adjustments to the inventory min/max levels and other factors have resulted in an increased backlog of district/post orders waiting to be filled as stock is pending ordering/delivery.



The lack of a formal method to track inventory levels and activity increases the likelihood of an inefficient requisition process and items potentially being out of stock or on backorder when districts/posts require these items immediately. Additionally, heavy reliance on employee knowledge, along with the absence of documented procedures, leaves the agency susceptible to reduced capabilities in the case of employee turnover.

Tracking and Chain of Custody of Inventory Items

Best practices for ensuring the accuracy of system inventory records is to clearly evidence when inventory is no longer on hand. Proper physical custody of stockroom inventory is vital to ensuring the accuracy of system inventory counts. Stockroom inventory can include items such as digital cameras, drug tests, ticket paper, evidence bags, stop sticks, etc. Some of these items are deemed to be “secure” items, which according to the operations manual, are to be secured on site in a separate cage to ensure they are not generally accessible by someone not authorized in the area and should be locked when Stockroom personnel are not present.

Under normal staffing conditions, once a pick ticket (district/post order) is completed, the stockroom staff person packing the order would sign and date the ticket to indicate it was complete. The PA would then review the order and update AIMS to show the order was ready to be picked up, which automatically depletes the system counts for those items. Due to current staffing constraints, the PA is picking and packing the orders received from the districts/posts and updating AIMS. This results in the lack of a secondary review to ensure items were picked accurately and completely.

Once orders are completed and marked ready for pickup, they are placed in district bins to await pick-up by the respective district. Items within these bins, including items deemed “secure”, are not fully secured as other non-stockroom employees and approved vendors/visitors may have access to the facility. As a result, there is no control in place for management to gain assurance that orders were picked up by the correct district representative. While “secure” items are assigned to the district within AIMS prior to pick-up, if that item is removed from their bin without anyone’s knowledge, the custodian listed is no longer accurate.

Additionally, patrol officers have the ability to walk-in the stockroom and collect items they may need without notifying Stockroom personnel. This not only affects the accuracy of the system’s inventory counts, but could unknowingly result in districts/posts requests being placed on backorder because an item is no longer available due to the undocumented walk-in order.

Failing to ensure inventory items remain secured or that walk-in orders are documented can result in unnecessary backorder of districts/posts inventory requests and unexplained inventory adjustments. Ultimately, this could be critical to OSHP operations if the items requested were an emergency order.

Formalized Procedures to Ensure Operational Efficiencies

Policies and procedures should be designed and implemented to prevent employees from performing incompatible duties, along with supervisor reviews to ensure processes are performed completely, accurately, timely, and consistently. Procedures should define roles and



detail actions necessary to guide a preparer through the completion of the process. OIA identified a lack of formalized procedures pertaining to the areas mentioned above, along with, but not limited to, the following:

- Formal procedures utilized to establish the minimum and maximum amount needed in stockroom inventory;
- Timeframes for which district orders will be fulfilled, including emergency orders;
- Schedule for performing physical inventory counts of items on hand; and
- Generation of various reports to be utilized on a regular basis to aide in an efficient process.

Incomplete policies and procedures can lead to variations within the inventory and warehousing process. Additionally, reliance on a single employee's historical knowledge rather than documented procedures leaves the agency susceptible to reduced capabilities and inefficiencies in the event of employee turnover.

Recommendation

Segregation of Duties and Supervisory Review

Evaluate procedures to ensure incompatible duties are delegated across multiple individuals. Consider utilizing other agency personnel to perform some of the incompatible duties until stockroom staffing is restored. In the event where delegation is not practical or possible, ensure there are compensating controls in place, such as supervisory reviews over various steps in the process. At a minimum, supervisory reviews should occur over the following processes: purchase requisitions, monthly inventory counts and necessary adjustments, and trending of min/max counts for inventory ordering. The policy should clearly distinguish between incompatible roles and establish controls as necessary. For example, if the PA must perform the physical inventory count, then a supervisory review must be in place to approve any adjustments being made to the system counts. Additionally, controls should be established within all systems utilized to prohibit an employee's log-in from being able to create and approve a purchase request; policy should enforce user log-ins remain private and not be shared.

Inventory Level Methodology

Clearly document the usage of the ABC inventory method including which stockroom items are in each classification category. As an example, management could consider the following:

- "A items" include inventory vital to daily operations and security and safety of patrol officers;
- "B items" which are important but not vital to daily operations, and
- "C items" to include supplemental non-vital inventory items.

Utilize historical data to establish/adjust the minimum and maximum counts for each item, ensuring levels align with the ABC method. Consider, at a minimum, utilizing the last year of order activity when adjusting the min/max levels. Ensure IRMS has the ability to automatically calculate projected usage based on historical information to help reduce the amount of manual adjustments needed. Inventory items within each ABC category and min/max inventory levels



should be periodically reviewed by management to ensure the item assignment in each category still aligns with operational need and usage.

Ensure IRMS is designed to create automatic system alerts which would notify stockroom management, or the purchasing unit, when specific items (i.e. category "A" items) fall below a certain level. This could then allow purchasing to automatically place a replenishment order within the constraints of a pre-approved purchase order. This would reduce the amount of time the PA is spending on ordering these essential items.

A backlog report and negative inventory report should be utilized and reviewed by OSHP management routinely to monitor activity of the stockroom. This can help management ensure orders are being placed timely to minimize backlog requests and negative inventory levels, as well as assist management in determining if there are additional reasons for inventory not being available. It is likely inventory demands will change as OSHP initiatives change, therefore ensuring inventory levels are appropriate becomes even more vital.

Tracking and Chain of Custody of Inventory Items

Create and implement a sign-out sheet to be utilized for walk-in orders; the sign out sheet should require the patrol officer(s) to document his/her name, the district/post they belong to, and the items taken. The PA should review the sign-out sheet on a daily basis and update the inventory system with a walk-in order to ensure inventory levels are accurate for subsequent system orders placed. This would also assist in minimizing the need for adjustments during inventory counts. A system-generated adjustment report should be created and monitored on a periodic basis to ensure adjustments appear reasonable. This report should be monitored by an individual independent of the adjustment process. Ultimately, the ability of IRMS to accept manual walk-in order requests (i.e. versus orders placed through the system and/or inventory adjustments) would provide better visibility and control over the inventory levels.

When picking up their orders, districts should be required to sign and date the pick ticket(s) or a sign-out sheet to indicate who and when the order(s) was picked up. Orders which include secure items should be secured separately from the bins and custody of those items should not be updated in the system until the District verifies receipt of the item(s).

Policy and Procedures

Lastly, develop and formalize policy and procedures for the areas referenced above and expand upon them to help ensure tasks are performed consistently. The procedures should also outline the responsibilities and duties of each individual involved, expected timeframes to complete the duties, and the retention requirements for information obtained or created during the process. The procedures should be communicated and accessible to all employees involved in the process in a read-only format on a shared drive. Policies and procedures should be reviewed by management on a periodic basis and updated when necessary to accurately reflect current practices.

Management Response



The Highway Patrol has reviewed the items noted in the audit report and has formalized the following strategy to provide more effective inventory control procedures in the future. Each item will be addressed separately in this response for the sake of clarity.

Segregation of Duties

The Division is currently hiring for the position of Administrative Officer 1 to oversee the Stockroom, Tailor Shop, and Warehouse. The duties of this position will include oversight and review of processes within the Stockroom. As part of this review process, the AO1 will review all inventory transactions completed in the Stockroom and will sign off on documents when items are received or inventory adjustments are made. Documents will not be filed until this managerial review is completed. Replenishment order requests will continue to be processed directly by the Stockroom Supervisor (Program Administrator 1), but receipt of those orders will be reviewed as noted above. As the department transitions to the new IRMS system, this process could become part of an automated tracking system in the future. Under the limits of AIMS, this process will require a second review of items and a manual signature acknowledging review.

Supervisory Review

Much of this overlaps with the remedy provided for Segregation of Duties noted above. The AO1 position will directly review all inventory adjustments and include sign off for inventory receipts and inventory adjustments (including cycle counts performed by Stockroom staff). All adjustments will be printed out and reviewed by the AO1 before filing. A new filing system will include all inventory adjustments made with explanations for adjustments signed off by the AO1. As noted above, the new IRMS system may have the capability of automating this process in the future. Under AIMS, this process will require an actual signature by the second level review.

Methodology to Ensure Adequate Inventory Levels

The Stockroom will review all current inventory items and assign A, B, or C status to each item. Once assigned a level of importance, a formal procedure will be developed to identify the frequency of cycle counts, inventory minimums and maximums, as well as the interval that should be used for review of those procedures. As new items are created and added to the Stockroom, those items will be assigned an A, B, or C status. One of the promised features in the IRMS system is that once established, at a minimum it will provide for automated notification for replenishment ordering. Along with the noted procedure development for regular review of inventory trends based on demand and item importance, both facets should provide a more proactive approach to inventory management to reduce backorders due to stock shortages. IRMS also promises enhanced reporting capabilities for easier review of inventory trends and backorder history. These reports will be utilized during the review process by management to determine adequate inventory minimums and maximums.

Tracking and Chain of Custody of Inventory Items



One of the greatest deficiencies of AIMS is the inability to track an item once it has been “issued” and marked “complete”. The delivery system utilized by the Division will require multiple handlers before the item reaches its final destination. IRMS scanning capabilities should enhance this process, at least through the point of receipt by the Maintenance Repair Worker picking up orders from the District bin. Under IRMS, there should be an automated record that the order was actually picked up from the bin. Until that system is fully implemented, this limitation will exist with AIMS. IRMS will also provide for better tracking of inventory released to walk in customers. AIMS currently has the ability to issue items to walk in customers, but there are busy times when customers forget to notify Stockroom employees that they have picked up an item. To improve this process until IRMS is fully functional, the Stockroom will utilize a sign out sheet to record walk in orders at the time of pickup. Stockroom staff will review the sign out sheet and verify entries were recorded properly a minimum of once per day.

In addition to sign in sheets for walk in orders, the Stockroom will also implement a sign out sheet for anyone picking up items from the District bins. The sign out sheet will require anyone picking up to note the number of orders picked up, time/date, and signature/position/assignment location. The sign out sheet will be kept at the District bin and reviewed by management if any receiving discrepancies are uncovered. Sign out sheets will be retained for 1 year by Stockroom management.

Secure items will no longer be left in the District bins. Items will remain in the Stockroom cage area with a note on the District bin telling the MRW to see a Stockroom employee for items in the cage area (e.g., HP7, Narcan, cameras). Only at the time of pickup will secure items be released from the Stockroom custody.

Policy and Procedures

A review of the procedure manual for the Stockroom will be completed with specific attention given to the development of more comprehensive job responsibilities by each member of the Stockroom staff. This review will also include specific items already alluded to in this management response. Once completed, the revised procedure manual will be available for all employees to review on a shared drive. All procedures will be reviewed annually to ensure that current practices are correct. Updates to procedures in the manual will be completed as necessary.

All items noted above not impacted by the IRMS implementation (scheduled for late October 2017) will be completed by 10/01/17. Unfortunately, it is not known how IRMS will fully impact operations until fully implemented and all capabilities are known. At a minimum, this will delay full revision of Stockroom procedure manual to late 2017 or early 2018.

Risk*	Remediation Owner	Estimated Completion Date
Moderate	OSHP Stockroom Manager	October 1, 2017

Due to the limited nature of our audit, we have not fully assessed the cost-benefit relationship of implementing the observations and recommendations suggested above. However, these



observations reflect our continuing desire to assist your department in achieving improvements in internal controls, compliance, and operational efficiencies.

* Refer to Appendix A for classification of audit observations.



Appendix A – Classification of Conclusions and Observations

Classification of Audit Objective Conclusions

Conclusion	Description of Factors
Well-Controlled	The processes are appropriately designed and/or are operating effectively to manage risks. Control issues may exist, but are minor.
Well-Controlled with Improvement Needed	The processes have design or operating effectiveness deficiencies but do not compromise achievement of important control objectives.
Improvement Needed	Weaknesses are present that compromise achievement of one or more control objectives but do not prevent the process from achieving its overall purpose. While important weaknesses exist, their impact is not widespread.
Major Improvement Needed	Weaknesses are present that could potentially compromise achievement of its overall purpose. The impact of weaknesses on management of risks is widespread due to the number or nature of the weaknesses.

Classification of Audit Observations

Rating	Description of Factors	Reporting Level
Low	Observation poses relatively minor exposure to an agency under review. Represents a process improvement opportunity.	Agency Management; State Audit Committee (Not reported)
Moderate	Observation has moderate impact to the agency. Exposure may be significant to unit within an agency, but not to the agency as a whole. Compensating controls may exist but are not operating as designed. Requires near-term agency attention.	Agency Management and State Audit Committee
High	Observation has broad (state or agency wide) impact and possible or existing material exposure requiring immediate agency attention and remediation.	Agency Management and State Audit Committee