



# INVENTORY, SHIPPING, & RECEIVING FRAUD

Hidden Dangers in Every Transaction

Lowers Risk Group – Risk Mitigation White Paper Series

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## INVENTORY SCHEMES

### BACKGROUND

While schemes involving the misappropriation of inventory and other assets are not as common as cash schemes, they are, nevertheless, potentially disastrous. Thefts of inventory can run into millions of dollars. And the median loss reported by the Associated Association of Fraud Examiners (ACFE) for non-cash assets was \$58,000, almost three times higher than median losses involving cash misappropriations (\$20,000).<sup>1</sup> Their report classified theft of non-cash assets into three categories: inventory schemes, supply schemes, and other asset schemes. Since most of the losses due to non-cash misappropriations involved theft or misuse of company inventory, this module will concentrate on this risk, with the emphasis being on theft of inventory. According to the GIA Trading Group, an International Trading Entity, inventory theft is typically accomplished using one of four methods:

1. **Simple larceny:** An employee walks off with the company property without any attempt to conceal it in the books and records. Examples:
  - Theft of parts, materials, or tools used on job sites and then sold.
  - Entering company premises during closed hours and stealing inventory.
  - Setting aside merchandise intended for delivery to customers or setting aside excess merchandise received.
2. **Asset requisition and transfers:** An employee requisitions inventory to be moved internally from one location to another. During the process, the employee steals the inventory. Examples:
  - An employee requests more material than is needed to complete a job and steals the excess.
  - An employee requisitions property to be used at a trade show and sells it after the show is over or converts it to his personal use.
3. **Purchasing and receiving schemes:** Falsifying incoming shipment records to cover up a theft is a frequent scheme. Examples:
  - Employee receiving a shipment of computer chips steals some of the items. However, he marks the copy of the receiving Document that goes to Accounts Payable as a full shipment. But the copy of the receiving document used for inventory records

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<sup>1</sup> 2012 ACFE Report to the Nations.

indicates a short shipment, thereby ensuring that the assets on hand match the perpetual inventory.

- Receiving clerk steals a portion of a shipment of expensive diamond-tipped cutting blades. However, he marks the receiving document as having rejected a quantity of the shipment due to damage or below quality control standards. The "rejected" items are never returned to the supplier, but instead are sold.
4. **False shipments of inventory:** False shipping documents are created to cause inventory to be shipped to a fictitious person or an accomplice. To cover up the false shipment, false sales documents are sometimes created to make it appear that the missing inventory was shipped to a customer. In 2012, inventory schemes accounted for 17.2% of all fidelity claims with a median loss of \$58,000.<sup>2</sup>

## TYPICAL/EXPECTED INVENTORY PROCESSES

### 1. Receiving

- An authorized purchase order to a vendor results in an inventory item being shipped to the user.
- The shipment arrives at the user's receiving location accompanied by a Bill of Lading. This shipping document should have the following information on it, at a minimum:
  - The user's purchase order number;
  - Shipper's name and address;
  - Consignee's name and address;
  - A description of the product;
  - The quantity ordered and the quantity delivered (weight, number of pieces, number of cases, etc.); and
  - Terms of payment.
- The receiver verifies the shipment in the presence of the shipper and signs the Bill of Lading. Typically, the Bill of Lading is date/time stamped at the receiving dock and a copy of the receiver-signed document is sent to Accounts Payable.
- If there is an on-line purchase order system that is available to the Receiving Dock, the receiver goes online with a user name and password, calls up the purchase order, and annotates the purchase order with the information regarding the type and quantity of the goods received.

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<sup>2</sup> 2012 ACFE Report to the Nations.

- If the goods received are to be added to the perpetual inventory (e.g., items used in a production process), the receiving document (paper or online) is sent to an inventory control clerk for updating of the inventory records. The product is then picked up by, or delivered to, the person responsible for physical custody of the perpetual inventory items. High value inventory should be physically separated from other inventory and protected by appropriate physical security measures, i.e., stored in a secure area, access controlled, monitored by CCTV, daily inventory reconciliation, etc.
- If the goods received are physical assets (i.e., furniture, computers, etc.), the receiving documentation is sent to the asset control clerk for tagging the property with an inventory control number, and for updating of the company's asset inventory records. Once these actions are completed, the property should be delivered to the end user, who should sign for the property.
- Goods maintained in the perpetual inventory should be subjected to two types of counts:
  - *Cycle counts*: Cycle counting is the process of counting inventory items throughout the year on a schedule so that all items are counted at least once a year. The primary focus is on items that move *more* frequently with less attention given to items that move *less* frequently. Cycle counts are conducted daily of selected items. The results of the physical count are then checked, based on the actual record, to see if there is a discrepancy between the two counts. A tolerance level is used to see how much above or below the actual count is compared to the record count. When a count is taken that is outside of the tolerance level, an examination is undertaken to understand the root cause of the error, i.e., theft, recording errors, etc. Which items are counted and how frequently is based on a commonly accepted "80/20" rule, where 80% of the volume in the warehouse comes from only 20% of the inventory items. Items that move most often are counted more frequently.
  - *Complete counts*: Complete counts are conducted at least annually as a minimum. When this occurs, the operations of the company are normally suspended and every item in inventory is physically counted. The results of the physical count are then compared to the inventory records and any discrepancies outside the prescribed tolerance levels are investigated.

Many companies use bar coding and RFID tagging to track many inventory items. These methods greatly increase the speed and accuracy of cycle counts and complete counts.

## 2. Shipping

- An order for the company's product is received by a sales unit (Internet sales order, telephone order, etc.).
- At the conclusion of the sale transaction, a "pick order" is generated. A pick order is nothing more than an order to pick certain quantities of goods out of inventory so that they can be delivered to the customer. This process will probably be fully automated as most medium to large businesses have computerized their sales and inventory procedures.
- Normally, at the same time a pick order is generated, the customer's bill of lading and shipping labels are prepared. This enables the person who is managing the inventory-picking process to match the picked item with the shipping documents. This ensures that all inventory items are accounted for and reconciled with legitimate sales orders.
- The picked items, bill of lading, and shipping labels are delivered to a packaging unit if necessary, where they are again verified before packaging.
- All packaged goods pending pick up by a freight carrier should be segregated from goods being received. They should be in a secure area with appropriate access controls. This could entail such elements as a locked shipping dock, card access controls, and CCTV monitoring.

## COMMON VULNERABILITIES

1. The purchasing system lacks adequate controls or checks and balances, thereby allowing fraud to be perpetrated. The most common purchasing weakness is inadequate control over the addition of vendors to the master vendor list.
2. Verification of shipments is weak, thereby allowing shippers and/or receivers to mark shipping documentation as being short.
3. The on-line purchasing system permits the receiver to see what was ordered. This allows the receiver to enter the "expected" quantity rather than the actual physical count.
4. The receiving person has access to the computer program that controls the inventory records and can cause the program to match fraudulent receiving records.
5. High value inventory is not provided proper physical security and/or access controls.
6. Fixed assets are not provided barcodes or property tags that allow the property to be readily tracked.
7. Cycle counts are inadequate, either in frequency or items selected (or both); variances in cycle count results are not investigated or reconciled.

8. Variances in complete count results are not investigated or reconciled.
9. Departmental or business unit managers have the capability to adjust inventory balances without appropriate management or audit review of the justification.
10. Controls are not in place to prevent fraudulent sales orders from being generated by unauthorized staff and processed.
11. High-value shipments are not provided proper physical security while awaiting pickup by the carrier.

## ESSENTIAL CONTROLS

### RECEIVING

1. Receiving policies and procedures have been incorporated into a written document; the document is current and contains all essential control elements identified herein.
2. The receiving area is physically separated from areas designated for shipping and inventory.<sup>3</sup>
3. Access by non-departmental employees to the receiving area is adequately restricted and controlled.<sup>4</sup>
4. The receiving area is equipped with intrusion/duress alarms.<sup>5</sup>
5. Receiving doors are padlocked when not in use.
6. Delivery documentation is processed in an area that is physically separated from the delivery, shipping, and inventory locations.<sup>6</sup>
7. Delivery personnel are restricted from entering any other company areas other than those required for delivery of goods and processing of their documentation.
8. Seal numbers on all tractor/trailer shipments are verified before the transporter is permitted to open the trailer.

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<sup>3</sup> Physical separation should entail more than just space. There should be physical barriers, such as a separate room, a separate and secured loading dock, a loading dock divided by a floor-to-ceiling chain link fence, etc.

<sup>4</sup> Controls may entail such features as physical barriers, access to the area controlled by card readers, the area under CCTV surveillance, and the receiving dock inside a fenced area with access controls to the area. The extent and nature of the controls depend upon the volume, value, and concealability of the items typically received.

<sup>5</sup> Intrusion alarms should be in place to prevent unauthorized access after hours. The alarm "windows" should be set so that the alarms can't be deactivated on certain days and between certain hours without security and/or management being notified. Duress alarms should be installed in the event of a robbery during working hours.

<sup>6</sup> Truck drivers or other delivery personnel should be restricted to a specific room from which they cannot gain access to the operational areas or inventory storage areas. This prevents them from viewing security measures, operational procedures, or obtaining information that might be useful in planning a burglary or robbery.

9. All goods received are inspected; the items received and the bills of lading are matched against the purchase order for correct quantity, item, and specifications.
10. The person receiving the goods signs for the shipment.
11. Purchasing databases and/or bills of lading are immediately documented with the details of all goods received.
12. Goods received are properly safeguarded pending transfer to the end user, to inventory, or return to the shipper.
13. High value goods are stored in a secure area or room pending transfer.<sup>7</sup>
14. Rejected items are returned promptly; all returns are fully documented.<sup>8</sup>
15. Management conducts random verifications, or auditing is performed on all items claimed to be returned to shipper.
16. The purchasing or inventory system issues exception reports for all items documented as returned.
17. Received property is added to inventory records as soon as possible.
18. Bills of lading and signed receipts for goods are forwarded to Accounts Payables within one business day.<sup>9</sup>
19. Trash from the area is inspected daily prior to transfer to a dumpster or access to the trash by cleaning personnel.

## INVENTORY PROTECTION

1. Inventory policies and procedures have been incorporated into a written document; the document is current and contains all essential control elements.
2. The description of fixed assets received (item, model, serial number, color, etc.) is entered into the inventory system.<sup>10</sup>
3. All fixed items are bar coded, affixed with a property tag number, or otherwise labeled so that the item can be readily traced throughout the organization.
4. Fixed asset inventories are conducted at least annually.<sup>11</sup>

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<sup>7</sup> (1) The physical security of the room or area is adequate (2) Access is controlled and documented (3) The area is under CCTV surveillance (4) Inventories are conducted daily.

<sup>8</sup> The auditing department and/or management needs to be able to track returns by receiver, shipper, items returned, and any other means that will assist in developing potential patterns of fraud.

<sup>9</sup> Automated inventory control systems should allow an on-line purchase order to be annotated immediately with the data from the packing list or bill of lading. Such a system does not negate the need for the signed receiving documents to be forwarded to Accounts Payable within the time specified.

<sup>10</sup> Asset descriptions are adequate to discriminate between individual asset items.

5. Monthly inventories and "cycle counts" are conducted; the physical count is reconciled with the inventory records, requisitions, job orders, or shipping orders.
6. Adjustments to inventory must be fully documented and approved by management.<sup>12</sup>
7. Inventory storage areas are restricted to personnel who work in the area. All visitors are escorted by departmental personnel.<sup>13</sup>
8. Access controls to inventory storage areas adequately restrict day of week and time of day access, as well as documenting persons granted access.<sup>14</sup>
9. High value items held in inventory are stored in areas having increased security. The security provided is adequate for the resources being protected.
10. If company facilities or storage areas are unoccupied during non-business hours, premise alarms are installed to protect storage areas and fixed assets throughout the facility.

## SHIPPING

1. Shipping policies and procedures have been incorporated into a written document; the document is current and contains all essential control elements herein.
2. Access to the shipping area is restricted to those employees who work in the department. All other personnel are escorted.<sup>15</sup>
3. Shipping, packaging, and staging areas are physically segregated from other operations. Access is controlled through suitable access control devices.
4. The shipping area is equipped with adequate portable and fixed duress alarms.<sup>16</sup>
5. Control measures are in place to ensure that employees do not have access to the inventory/shipping/staging areas during non-duty hours.
6. Pick lists are generated based upon valid customer orders and/or product requisitions only.<sup>17</sup>

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<sup>11</sup> Missing documents are investigated by someone outside the department, i.e., auditing, security, etc.

<sup>12</sup> The physical count is reconciled with the fixed asset records; differences are investigated.

<sup>13</sup> Such adjustments should result in "exception reports" to management and the auditing department.

<sup>14</sup> Access controls are used to restrict entry to inventory storage areas. Such controls include one or more of the following: (1) Card access, biometric access, or similar methods to control personnel movement (2) Intercoms (3) CCTV cameras to monitor entry & exit points as well as activity within the storage area.

<sup>15</sup> Preferably, access would be controlled through the use of a card access control system and access monitored by CCTV.

<sup>16</sup> This is an anti-robbery provision and is more important where the inventory is a more likely target for a robbery (i.e., computer chips, etc.). Portable duress alarms are recommended so that personnel can still move freely throughout their work area but have immediate access to a duress alarm in the event of a robbery.



7. Items designated for picking are automatically removed from the active inventory records.
8. Trailers are not pre-loaded.
9. Inactive shipping doors are padlocked when not in use.
10. Products removed from inventory based upon pick lists are verified by a person other than the picker.
11. Products to be shipped are compared to the customer order prior to shipment.
12. Completed orders pending shipment are staged in a secure area.
13. High value goods are stored in a secure area or room pending shipment.<sup>18</sup>
14. CCTV coverage of the staging area is adequately provided. Camera output is recorded.
15. Shippers are restricted from accessing shipments not consigned to them.
16. Access to loading docks is adequately restricted.<sup>19</sup>
17. CCTV coverage of the loading docks and loading area is adequately provided.<sup>20</sup>
18. The trailers on all truck shipments are sealed and the seal numbers are annotated on the shipping documents.<sup>21</sup>
19. Truck shipments (excluding commercial postal carriers) are required to be locked with a "substantial" padlock prior to leaving the shipping dock.
20. Trucks departing loading docks with shipments are periodically and randomly stopped to compare the contents of the truck versus the shipping documents.
21. Trash from the shipping area is inspected prior to being placed in dumpsters or access by cleaning personnel.

## COMPENSATORY MEASURES

1. There are a significant number of controls that must work in concert in order to prevent inventory losses. It is difficult to compensate for any weaknesses because of this situation. Nonetheless, some measures can provide a certain degree of compensation, but certainly the potential for losses will remain.
2. Good pre-employment screening is essential.

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<sup>17</sup> Requisition forms should be carefully controlled, pre-numbered, and accounted for regularly. One would expect that supervisors/managers would be expected to sign requisition forms and that policies would be in place to define who can sign them and for what items.

<sup>18</sup> (1) The physical security of the room or area is adequate (2) Access is controlled and documented (3) The area is under recorded CCTV surveillance (4) Inventories are conducted daily.

<sup>19</sup> Ideally, carriers should not be able to drive up directly to the loading dock. Preferably, the loading dock is in a fenced area with access controls. The carriers needing to enter the area should be verified prior to granting access.

<sup>20</sup> CCTV output should be recorded, as a minimum. Preferably, it should also be monitored.

<sup>21</sup> IMPORTANT

3. Strong supervision of unloading and loading procedures during receiving and shipping operations
4. Frequent cycle counts with low tolerance levels and with all variances investigated.
5. Semi-annual complete counts with all variances investigated.
6. Good physical security of the inventory storage areas during non-working hours. Storage areas should be securely locked and alarmed.

## CASE STUDY: THE PURLOINED LADDERS

ABC Company (ABC) conducted physical inventories on June 30 and August 31, 2012 and discovered a growing discrepancy between inventory values on the books and actual inventory on hand. Acting upon a tip from an employee, ABC began an investigation focused on Suspect #1 (S-1), an employee at ABC's Atlas, Tennessee manufacturing and distribution facility. ABC's investigation revealed that S-1 had allegedly purchased returned stock unsuitable for resale, and was selling it at flea markets and yard sales. ABC found no financial records of S-1's purchases or of the proceeds of the sales to S-1 being remitted to the company. Further investigation aroused suspicion that S-1 was also stealing non-returned (new) inventory and selling it for his benefit.

A company vice president (VP-1) advised that each facility controls and maintains its own finished goods perpetual inventory system. The system tracks inventory quantities on hand and corresponding dollar values by individual products. Inventory control personnel update the system daily to reflect product received from the production line, product received from the manufacturing plant in Mexico, product shipped out to other ABC warehousing/distribution facilities, and product shipped (sold) to customers. This process survived the merger and is still in place today.

At the time of the merger, the perpetual inventory system at all facilities was integrated with their general ledger software. If adjustments were made to inventory quantities, a corresponding dollar entry was automatically registered in accounting records. Thus, the perpetual inventory value and the value of inventory on the accounting books should be identical.

The relationship between perpetual and accounting inventory values changed in October 2010 when ABC converted to new accounting software. With the new software, perpetual inventory is not integrated with the general ledger. Inventory transactions entered by the inventory control personnel only affect the perpetual inventory quantities and values maintained by each facility and do not affect the accounting records (general ledger) maintained by the Hampton office. As a result of this change, if substantial erroneous and/or fraudulent entries were made to the perpetual inventory system, they would create a difference between the perpetual inventory value and the inventory value on the accounting records (general ledger). It is important to note that inventory values are not segregated and tracked by location in the general ledger. The total value of inventory at all of the various ABC locations is carried as one amount in one general ledger account, "finished goods inventory". In order to compare the two values, one would have to obtain each location's inventory values from their respective perpetual system, and total the individual values to determine the total finished goods inventory per the perpetual system. This value could then be compared to the general ledger balance.

**Discovery of Inventory Shortages/Loss:** VP-1 stated that all ABC facilities conducted a complete physical inventory as of June 30, 2012. Quantities on hand in the perpetual inventory system were adjusted, where necessary, to reflect the actual count. The total inventory value based on the

perpetual system was calculated and compared to the general ledger. According to VP-1, a substantial difference existed between the two values. As a result, a second physical inventory was conducted as of August 31, 2012. When the results of the second inventory were compiled several weeks later, the perpetual inventory value was \$1,395,793, less than the general ledger value.

ABC focused their attention regarding the shortage on the Atlas operation. The Plant manager (Manager-1), had been approached by a plant employee and was told that the employee had observed a truck belonging to fellow employee, Suspect #1 (S-1), at the facility after normal business hours on several occasions. The truck was backed up to several different loading docks at different times. The employee also reported that he believed S-1 had a side business selling ladders. In early October, ABC contacted North American Investigative Resources, Inc., (NAIR), an investigative firm.

**Atlas Facility:** VP-1 advised that the Atlas facility served as a manufacturing and a distribution facility. The facility produces wooden ladders from raw material. The finished product bears the Imperial label. The facility also receives Imperial finished product, fiberglass, steel, and aluminum ladders from the manufacturing plant in Mexico. The inventory control department at Atlas generates purchase orders to the Mexican plant, receives and stores the product, and generates shipping documents related to orders placed by customers. Atlas warehoused finished product for future distribution and also controlled managed product stored at four public warehouses. These warehouses were located in Dallas, Texas; Cherry Hill, New Jersey; Phoenix, Arizona; and Orlando, Florida. Atlas also directed product shipments from Mexico into all of ABC's other warehouse facilities, including the warehouse in Atlanta, Georgia. VP-1 stated that all of these facilities maintained their own perpetual inventories; however, Atlas had computer access to their inventory systems.

**Conspiracy Theory:** VP-1, Vice President of Finance and Treasury, and ABC's investigative firm, NAIR, believe that S-1 had co-conspirators profiting from his activity. They speculate that initially S-1 may have legitimately purchased some of the blue tag ladders. However, the practice grew and became an ongoing operation. They contend that Atlas plant manager (Manager-2) was involved and received a substantial amount of monetary profit. They also believe that financial controller Gary Heilman had knowledge of S-1's activity, knew that the company was not being paid for the ladders "purchased" by S-1, and may have been paid to maintain his silence. According to VP-1, after leaving ABC, Manager-2 purchased a florist business, allegedly paying over \$1 million dollars cash in the acquisition. Currently, ABC cannot substantiate their theory.

A check of public record reflects that Manager-2 is listed as the registered agent of Bob's Florist, Incorporated, 198 Main Street, Atlas, TN. The record shows the business was incorporated on February 7, 2012. NAIR had no additional information regarding the business.

Information presented by ABC clearly indicates that S-1 was obtaining and selling ABC product for his benefit. S-1 had uncontrolled access to the facility and access to the perpetual inventory

system. ABC contends that S-1 adjusted the inventory records in an attempt to cover the fact that he was stealing inventory. According to VP-1, S-1 made "wholesale" adjustments to Atlas's inventory utilizing two primary adjustment codes, "cycle count adjustments" and "in plant use". According to VP-1, warehouse personnel would routinely conduct cycle counts (the physical counting of various inventory items). Perpetual inventory records were then adjusted, if necessary, to reflect the actual quantity on hand based on the physical count.

ABC was able to run printouts from the perpetual inventory records listing all the adjustments to inventory that the system reflected were made by S-1. The available information on the system covered the time frame of October 2011 through December 2012. No information was available prior to October 2006. NAIR reviewed these reports and compiled a schedule. Total cycle count adjustments resulted in decreasing the perpetual inventory by \$507,975.22. In addition, adjustments of \$338,044.68 were made to the inventory reflecting that these ladders were taken out of inventory and put in use at the plant. For comparison the same type of adjustments made to the Hampton, KY distribution facility were compiled. S-1 did not control any inventory movement from this facility and did not have access to its perpetual inventory records. The cycle count adjustments at the Hampton facility resulted in an \$18,978.25 decrease to inventory for the same time period. "In plant use" figures for the Hampton facility were not available. It should be noted from the schedule that the inventory adjustments at the Atlas facility are significantly reduced in November and December 2006. S-1 was fired on November 1, 2012. Atlas has filed a claim for theft of ladders amounting to \$2,795,662.

## LOWERS RISK GROUP – Fidelity & Crime White Papers

There are three conditions that are present when fraud occurs: Opportunity, Incentive, and Rationalization. The information contained in these papers demonstrates examples of vulnerabilities and how applying essential controls can significantly reduce the risk of fraud.

### ABOUT LOWERS RISK GROUP

Lowers Risk Group combines the services of three industry-leading companies – Lowers & Associates, Proforma Screening Solutions, and Wholesale Screening Solutions – to create a complete risk management service offering for organizations of all shapes and sizes. Employed in concert or on a standalone basis, we excel in providing comprehensive enterprise risk management and human capital risk solutions to organizations operating in high-risk, highly-regulated environments. Our specialized background screening and crime and fidelity risk mitigation services protect people, brands, and profits from avoidable loss and harm. With Lowers Risk Group you can expect an experienced and professional approach to your risk assessment, compliance, human capital, and risk mitigation needs to help move your organization forward with confidence.

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