

TTC AUDIT COMMITTEE REPORT NO.

MEETING DATE: April 19, 2011

SUBJECT: INTERNAL AUDIT REPORT – RAIL CARS & SHOPS
DEPARTMENT – HARVEY SHOP

INFORMATION ITEM

RECOMMENDATION

It is recommended that the Audit Committee receive for information the attached Internal Audit Report.

BACKGROUND

Internal Audit provides the Commission with independent evaluations of the efficiency and effectiveness of control systems, and operations. Internal Audit is also required to provide recommendations for improvement.

Richard G. Beecroft
Chief Auditor

April 19, 2011
01-23

Attachment – Internal Audit Report

**OPERATIONS BRANCH
RAIL - RAIL CARS & SHOPS DEPARTMENT**

HARVEY SHOP

**COVERING PERIOD
January 2008 to December 2009**

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EXECUTIVE SUMMARY

This audit assessed the key management and operational controls of Harvey Shop, Rail Cars & Shops Department, Operations Branch. An Exit meeting was held on December 2, 2010 with the General Manager – Operations Branch, Deputy General Manager – Rail, and the General Superintendent – Rail Cars & Shops Department to discuss the findings.

Audit found that Harvey Shop has a strong management team to oversee the area and maintain good controls. However, Audit identified areas which required strengthening of the existing controls to minimize risk exposures.

Recommendations were made to improve the estimate process as well as the reporting and monitoring of actual vs. estimate hours in the Sheet Metal Section. The section also needs to review and address the extensive backlog of work. Management agrees with Audit's recommendation and has implemented action to improve the estimating and monitoring process. In addition, Management will request additional resources to deal with the backlog of work.

Audit also recommended that safety critical training should be identified and scheduled for staff and hourly employees. Management agrees and is in the process preparing a training SOP.

Other areas identified for improvement in controls were lunchroom activities, such as, cash handling, financial reporting, purchases and inspections of the lunchroom facilities. Management will conduct a review of all TTC lunchroom operations, in the mean time they have strengthened controls over the financial management and are working with the Safety Department with respect to the inspection requirements. Audit also recommended that procedures should be strengthened to ensure that all work completed by technical staff is documented and reviewed by management. Management agrees and is in the process of improving documentation in the noted areas.

We wish to express our thanks for the cooperation and assistance received from all parties during the course of the Audit.

R.G. Beecroft

K. Draudvila

FOREWORD

Harvey Shop is one of five sections within Rail Shops. The shop performs vehicle overhaul on streetcar and bus vehicles and component overhaul for streetcar and subway vehicles. The shop also fabricates various parts and assemblies for other departments and provides maintenance services for garages and carhouses.

AUDIT SCOPE AND OBJECTIVES

SCOPE: A review of key management and operational controls with regards to Harvey Shop for the period January 2008 to December 2009.

OBJECTIVES: To assess the management and operational controls to ensure:

- accountability and reporting relationships are appropriate for the Commission;
- due regard for economy, efficiency and effectiveness; and
- procedures and processes are in place to measure and report on key activities.

To evaluate the adequacy of management controls to ensure:

- compliance with legislative and TTC requirements;
- timeliness, accuracy, completeness and authorization of transactions and data; and
- safeguarding and controls of assets.

AUDITED ITEMS FOUND ACCEPTABLE

KEY CONTROL	FINDING
Program Work	Special Work Instruction Sheets are prepared and completed for all identified work, scheduled and tracked in the maintenance systems.
Bus & Streetcar Collisions	Estimates and repairs are prepared in accordance to procedures and when approved are included in the collision schedule.
Purchase & Contract Administration	Purchases are made in accordance with TTC Policy.
Payroll – Hourly Workers	Attendance for hourly workers is monitored and accurate records are maintained.
Records Management	Records are efficiently and effectively managed and the Department adheres to the TTC records retention by-law.
Occupational Health & Safety	Regular workplace inspections are scheduled in advance and results are reported to Management who responds to safety issues raised.

AUDITED ITEMS FOUND UNACCEPTABLE

FINDING #1

PROJECT ESTIMATES

OBJECTIVE: To ensure project work is controlled and monitored.

ANALYSIS: The Sheet Metal Section (J7) in Harvey Shop receives hundreds of work requests annually. It is the responsibility of the section Foreperson to prepare a labour and cost estimate for each job request. The estimates are then forwarded to the Senior Foreperson for their review and approval.

Audit's review of the estimates, the Job Based Cost System (JBCS) and actual hours charged identified the following weaknesses:

- The original labour estimate varies significantly from the actual hour's charges in the JBCS. A review of 10 work order had 9,505 hours of labour estimated by the Foreperson. The JBCS had 5,574 hours of labour recorded, 41.4% lower than estimated.

There is no evidence of review by senior Harvey Shop management of the reasonableness of the estimates after they have been approved.

- The hours reported on the work order system, by the Forepersons, were found to vary from the amounts hours recorded on the time sheets and the JBCS.

At the time of Audit's review, there were 553 open work orders representing almost 26,800 hours of work. This represents about a thirteen year backlog of work, some several years old, with no plan or time line of when the section is expected to schedule and complete the outstanding work.

RECOMMENDATIONS:

Management should:

- Develop a review process to ensure that the estimates are reasonable when compared to the actual hours reported.
- Run regular reports from the JBCS and compare results to the actual hours reported by the Foreperson and ensure that the necessary documentation is prepared to correct the entry to capture the correct costs to each work order.
- Review the current backlog of work, determine if the estimates are reasonable and develop a plan to address the outstanding work.

MANAGEMENTS RESPONSE:

JBCS data cannot be reliably used to track actual hours charged to a specific task since most tasks are charged to general job numbers. However, in order to address the concerns raised in the report the following steps have been taken:

- The scheduling and planning functions for the Sheet Metal Section have been transferred to the Production Planning & Control group.

Completed

- Labour hours are now being tracked by scheduled work. Actual hours are tracked against the task. A report of actual vs. estimates will start for the month of January for completed projects.

Completed

- In order to deal with the backlog, Harvey Shop has requested three additional resources through the 2011 budget process.

Responsibility: General Superintendent

Status: Ongoing

FINDING #2

SAFETY TRAINING

OBJECTIVE: To ensure safety training activities are efficiently and effectively managed.

ANALYSIS: Required training has not been identified by position within Harvey Shop.

Audit's review of the processes and controls in place to ensure that employee training is monitored and scheduled when required found that management has created and approved a training procedure entitled "Mandatory Training/Certifications & Orientations for Rail Cars & Shops Employees". The procedure identifies the required training necessary to be able to complete the work in a safe and efficient manner.

During the review audit was informed that the identified training was not applicable to Harvey Shop positions. A similar document has not been prepared for the section.

Audit also noted that although there are defined training requirements for all shop Forepersons, some safety critical courses that the hourly workers are required to take, such as Confined Space, are not required to be completed by the Foreperson.

Without taking the same safety critical training there is no assurance that the Foreperson is able to adequately monitor and supervise their employees to ensure the work is being conducted in a safe manner.

RECOMMENDATIONS:

Management should ensure that:

- All mandatory training should be identified and scheduled to ensure all Forepersons and hourly workers have the required training to fulfill their responsibilities.

- The Standard Operating Procedure is reviewed and the training needs of the Forepersons updated so that all the safety critical training required by their employees is also identified as part of their training requirements.

MANAGEMENT'S RESPONSE:

Consequent to the amalgamation of the previously Rail Cars & Shops and Streetcars Departments under Rail Cars & Shops, Mandatory Training/Certifications & Orientations for Rail Cars & Shops Employees Procedure ROP-SP-26-4 is to be revised and reviewed to include all RC&S locations and identify all safety critical training requirements.

Responsibility: Superintendent Technical Services

Status: December 2011

FINDING #3

LUNCHROOM

OBJECTIVE: To ensure effective controls are in place over lunchroom operations.

ANALYSIS: The lunchroom operates in a cafeteria style for the benefit of shop employees by serving pre-packaged foods at breaks and lunch.

Audit's review found that;

- Harvey Shop maintains records for lunchroom revenues and expenses. Not all the staff assigned to lunchroom duties is expensed to the correct labour account. Inclusion of all related staff costs and benefits would result in increasing the loss on lunchroom operations from \$47,300 for 2009 to approximately \$100,000 for the year.
- No determination has been made as to whether the lunchroom falls under the City of Toronto's Dine Safe regulations. It may be subject to regular public health inspections.
- A cash float of \$655 (at time of Audit's count) split between the cash till and an office safe, is not recorded in TTC's financial accounts.
- Weekly purchases of pizza and sandwiches are paid in cash out of the till. No purchase orders or contracts exist between TTC and these vendors.

RECOMMENDATIONS: Management should review and implement improved controls over the cash handling, financial reporting, purchases and inspections in the lunchroom operations.

MANAGEMENT'S RESPONSE:

Operations Branch will conduct a review of all TTC lunchroom operations. In the interim Management will address Audit's concerns as follows;

Financial Reporting: Harvey Shop budgets one full time position for the lunchroom, other employees provide help prior to and during coffee and lunch times. Harvey Shop will ensure hours worked at the lunchroom are appropriately charged to the expense account.

Completed

Purchases: Harvey Shop will establish purchase orders or contracts for weekly purchases of pizza and sandwiches.

Cash Handling: Harvey Shop, in conjunction with Finance, have recorded the cash float.

Completed

Inspections: There should be a corporate direction in this regard that would apply to all lunchrooms at the TTC. A review is underway by the Safety Dept.

Responsibility: Superintendent – Rail Cars & Shops

Status: December 2011

FINDING #4

TECHNICAL SUPPORT

OBJECTIVE: To ensure that equipment failures are analyzed, tracked and corrected and that reliable information systems are in place to support reporting and manage inventory.

ANALYSIS: Technical support is provided to the shop by an Engineering Technologist and an Industrial Engineer. Additionally, there are several information systems in place to support these functions including the Production Information Control System (PICS).

Engineering Technologist (ET)

The ET is responsible for reviewing all traction motor failures that are brought into Harvey Shop that have occurred within 500 days of being overhauled or rebuilt. The Log-In sheet that accompanies the motor through the shop should have a complete record of the defects found and repairs required in order for the ET to determine fault trends and corrective action.

Audit's review of the approximately 100 Log-In sheets found 8 without any notes indicating what, if any work, was done to determine why the motors failed. The ET could not explain the omission.

Industrial Engineer (IE)

The IE identifies inefficient, ineffective work processes, methods or floor layouts that inhibit the most economical delivery of services.

Audit's review found that at any point in time it is difficult to determine what job the IE is working on. The IE implements changes without any documentation. Documented project milestones are not developed against which progress can be measured.

Inventory Management

The Inventory Planner is responsible for ensuring sufficient stock parts are available so that vehicle repairs can be made as required.

Audit's review found that there is no reconciliation or verification to compare the purchase orders issued by the Inventory Planner to the actual work orders set up in PICS by Production Control.

For example, a purchase order was issued in September 2009 for 30 streetcar skirts, but the Production Control section has not created a work order to fabricate the items. Another purchase order was issued in January 2010 for another 20 streetcar skirts, which are being fabricated. The Inventory Planner is expecting 50 streetcar skirts which are required to meet the demand.

RECOMMENDATIONS: Management needs to develop processes to ensure that all work completed by technical staff is documented and reviewed.

Management should ensure that:

- All traction motor failure documents are reviewed, completed and tracked to assist in identifying reasons for the failure, along with appropriate actions to minimize the failure from occurring.
- Work procedures to request assistance from the IE document the request for change. Expected results and documented recommendations are developed and implemented. All changes should be documented. Management should monitor the progress of the project and evaluated the effectiveness of the change.
- A system report between PICS and the Material Management System (MMS) is developed to compare the purchase orders issued to what has been received and acknowledged. Production Control should follow-up with Inventory Management on any variances.

MANAGEMENT'S RESPONSE:

Engineering Technologist: The Engineering Technologist will develop a procedure to create a special work order on set criteria. Equipment that falls under these criteria will have special work order codes that will easily identify the equipment and also will attach a check sheet to the work order. All records will be kept in SMS.

Industrial Engineer (IE): A process was developed to ensure major projects are documented. However, IE's are looked upon for daily guidance on a variety of minor issues that are not tracked.

Completed /Ongoing

Inventory Management: A system report will be developed by the Superintendent. – Rail Cars & Shops six months after the introduction of Industrial & Financial Systems (IFS).

Responsibility: Engineering Technologist / Superintendent – Rail Cars & Shops

Status: October 2011 / Ongoing