

Priority Freight Costs: An Experiential Introduction to Operational Auditing

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Abstract

In auditing courses, internal controls are presented as the policies and procedures used to help ensure the accuracy of the financial statements. In managerial accounting courses, the internal controls established by management are presented as a tool to control costs. This case can be used in either an auditing or managerial course to demonstrate that adequate internal controls and the proper alignment of authority and performance can have an impact on profitability. Through interviews and analysis, students observe how employees utilized priority shipping on raw material purchases to improve the performance metrics. The case exposes students to the operational auditing process, the necessity of designing appropriate performance metrics, and the impact of properly designed internal controls on operating costs.

INTRODUCTION

You have been recently hired as a senior auditor in LoMax International's internal audit department and have been tasked with completing an operational audit of the Consumer Products Division's 4th quarter 2020 inbound freight costs (IFC). The Divisional Vice President, Ruchika Long, requested the review after expressing concern that the division's freight costs have risen significantly in recent quarters. Your next step in this process will be a meeting to review the results of your audit with Ms. Long and the division's controller, Guillaume Durbin.

DEFINITION OF THE PROBLEM

You feel as though your time in public accounting provided a strong foundation in financial audits, but you are inexperienced with operational audits. Your research etches the sharp contrast between a "backward-looking" focus on the accuracy of historical financial statements and the "forward-looking" focus on improving efficiency and future performance. You realize that although the increase in freight costs may not be material in a financial audit setting, the goal of an operational audit is different, and therefore the scope is different. You now understand that your task is to uncover why the consumer products division's freight costs have risen so that future performance can be improved. You feel that it would be best to start by defining the problem at hand.

You begin by reviewing the background of the company (appendix A). Despite a steady increase in sales, the profitability of the consumer products division is decreasing. The consumer products division specializes in short-

lead-time customer orders, and this responsiveness to customer requirements has allowed LoMax to attain slightly higher operating profit margins than many other companies that operate in this highly competitive market. Short lead times are critical to fulfilling customer orders, and these depend on LoMax's ability to orchestrate the timely delivery of raw materials, sub-assemblies, and component parts. The consumer products division thus incurs a significant volume of freight charges. To better understand the profitability history of LoMax's consumer products division you complete the quick profitability analysis shown in Figure 1.

Inventory varies according to the size and nature of the orders that arrive, and a visual analysis indicates a favorable trend on inventory DOH (Days On Hand) statistics, from approximately 135 days at the end of the first quarter in 2018 to 111 days at the end of 2020 (See Figure 2).

LoMax bonuses and promotions are based on a calculation of divisional net income. LoMax Corporate calculates this for consumer products division by using an assumed asset turnover ratio of 1.6, a capital charge of 6.4% of assets and a combined tax rate of 25%.

Despite operating profitably for 28 of the last 30 years, consumer products division managers have come under increasing pressure to increase profitability and reverse a recent downtrend in operating margin and return on sales (RoS).

Your task

Now that you clearly see the importance of freight costs to the division's profitability you need to gain an understanding of each position that could impact freight costs. You need to get a firm handle on who is responsible for freight costs in the consumer products division first with a review of the consumer products division's organizational chart (Figure 5) and definitions of job responsibilities (appendix B) followed up with a discussion with key employees. You will then perform some audit procedures and analysis to finish up your investigation.

DISCUSSIONS WITH DIVISIONAL AND CORPORATE PERSONNEL

To get a better understanding of the use of priority airfreight shipping you interviewed individuals at the divisional and corporate levels. These included the Divisional Accounting Controller, the Divisional Production Manager, the Divisional Materials Manager, the Divisional Purchasing Manager, and the Corporate Director of Transportation. In preparation for these meetings, you reviewed all corporate and divisional policies regarding materials procurement and freight costs. You concluded that all references to corporate and divisional policies made by the interviewees were complete and correct. Transcripts from the interviews can be found below.

1 Interview with Consumer Products Divisional Accounting Controller, Guillaume Durbin

The Consumer Products Division is in an industry that is highly competitive – manufacturers of consumer retail products. Unlike the other divisions within LoMax, our products are less differentiated which, except for high-end consumer products, creates an almost commodity type of competitive situation. As a result, our margins are lower, and we have been directed by corporate to identify opportunities for cost reductions that will not impact quality.

One area we are concerned with is inbound freight. Corporate Traffic originally brought the inbound freight problem to our attention. I have been watching the rise in inbound freight costs for domestic shipments over the past year. Unfortunately, my staff is currently overwhelmed with our ongoing responsibilities and we have not been able to devote personnel to the problem. In discussions with Ruchika, I recommended that Internal Audit take a look at our 4th quarter 2020 inbound freight costs to give us some insight into the problem. I am requesting the 4th quarter because freight as a % of sales was the highest (1.01% of \$80,620,000). We are beginning to get pressure from Corporate to get our transportation costs in line with those at other divisions. Everyone is frustrated because no one takes ownership of freight costs. We do not control rates, but the charges go against our profit & loss.

As with other divisions in the company, we use standard costs for costing our inventory. The standards are important as they are used for pricing and overall control of manufacturing performance. We have been able to overcome some of the shortcomings of standard costs by maintaining current, realistic standards and timely reporting.

One of the problems we need to address as a corporation is how to better control inbound freight costs on domestic material purchases. We have not included freight costs in the standards as they are relatively immaterial and because we maintain lean inventory levels. Rather, freight costs on domestically sourced materials are treated as a line-item expense (Account 63 – Inbound Freight) on our plant budgets and divisional profit and loss statements. We establish the budget for freight as a percentage of U.S.-based sales generated by our U.S. plants. Although we could refine the cost driver, we have found that the budget number is reasonable. Traditionally inbound freight to our division's U.S. plant-generated sales has run a fairly consistent .80% of sales. Note that U.S. plant-generated sales do not mean domestic sales. Our plants both export products as well as supply our U.S. customers.

In recent quarters, inbound freight costs as a percent of sales have increased dramatically. Originally, I thought it must be due to increasing freight rates which prompted me to complain to the Corporate Traffic Director, Steve Gruff. Steve can be a bit temperamental. I was a bit embarrassed when he told me that domestic rates had actually held steady or decreased slightly on most lane segments. He then proceeded to lecture me that high freight costs are a question of management, not of rates. He said his area supplies very competitive rates and routings, but it is up to division management to effectively manage how we use transportation. And I must say, this time he was right.

But I digress. During the past year, our IFC as a percentage of sales increased (from .80% of U.S.-based sales in 2019) while freight for the company's other divisions remained flat at around .78% of U.S.-based sales. While the increase may not seem significant, our divisional margins are under significant market pressure because our product lines are more of a commodity compared with the other divisions. To generate the returns the corporation expects, we have to maintain tight control of our costs.

As you requested, I asked one of my analysts to prepare an analysis of Account 63 – Inbound Freight Costs for the 4th Quarter, 2020, and the entire year. We summarized the costs by our standard and most economical routings (less than truckload (LTL) and truckload), by the priority freight costs we incurred because our Materials Manager, Alla Tabuyo, authorized divisional purchasing to expedite some orders to our suppliers, and by the priority freight costs authorized by our divisional purchasing group. Steve (Corporate Traffic) was also kind enough to supply me with a summary of U.S. inbound freight costs by division for LoMax. I combined the two reports for your convenience, see Exhibits 1 and 2.

2 Interview with the Division Production Manager, Ivan Kanzaki

We run efficient operations, but we are getting killed with inbound freight. Since the plants are cost centers, we are evaluated on the budget to actual costs in addition to quality and on-time performance. My problem as the production manager is there is nothing I can do about the rising levels of inbound freight costs. Corporate Traffic tells me we have some of the best freight rates in the industry, but you couldn't prove that by me. Our freight costs just continue to rise, and I am getting pounded by Ruchika and Guillaume.

3 Interview with the Divisional Materials Manager, Alla Tabuyo

We work closely with Divisional Purchasing when ordering a product, and we base our decisions on a combination of computerized demand models and our own judgment. Generally, we estimate our requirements for the year and then modify the forecast quarterly/monthly depending upon how volatile the demand is. Our goal is to have the raw material inventory on hand 2 or 3 days before it is scheduled for production in the plant. It is very important for Purchasing to meet our schedule as we do not carry large amounts of inventory. As a result, we receive a lot of deliveries. A lack of material at one plant will create significant scheduling problems down the line. Fortunately, we have not had any downtime this year because of a lack of inventory. We have had to reschedule production occasionally because a supplier is late, but it has not created a significant problem. Purchasing is doing a very good job for us. Our division has the highest supplier on-time performance percentage in the company.

I have seen the monthly budget statements and I cannot figure out why our freight costs are so high. We have been within $\pm 2\%$ of our production forecast for the past eight quarters. Demand has been improving consistently with our forecasts and I have not expedited any more this year than in previous years. When we expedite, we have an emergency order from a customer that we must fill immediately so we need a supplier to deliver raw material sooner than we originally intended. In most situations, the customer is willing to pay an expedited freight charge (which is billed to

the customer as part of the product invoicing) as the problems originated at the customer. For these expedited orders, I authorize priority freight so we can get the materials when we need them. Priority freight on expedited orders amounted to about \$202,526 during 2020, hardly something that can account for our being 24% over budget for the year. I think Purchasing occasionally expedites deliveries because a supplier is behind schedule, but my understanding is such expedites are very infrequent. I think we need to have a sit down with Corporate Traffic to find out why we are being charged so much.

In another matter, Guillaume told me he was going to ask you about our increase in inventory. I honestly am not certain what is happening although I haven't devoted a lot of time it because the increase is fairly minor. I would appreciate knowing anything you find out about the inventory that may help us get the levels down.

At Guillaume's request, I had my staff pull all the documentation for material purchases and the related inventory transaction records for the 4th Quarter of 2020. My staff reported that we authorized 46 expedited deliveries with a total cost of \$71,990. In addition, the average LTL freight cost approved by our division for the 4th quarter was \$472.

4 Interview with the Divisional Purchasing Manager, Philben Bates

I started working in the Division a little over a year ago after working for another connector company for 5 years. For commodity and strategic items like metals and plastic resins, Corporate Purchasing negotiates annual contracts for the company and issues a blanket purchase order for each division based on its annual projections. At the division level, we issue purchase order releases against the blanket order as we need the product. We also procure materials for the division that are not handled by Corporate. These include items that are unique to our division or not considered strategic. And we also select assembly suppliers for custom assembly work.

Divisional Purchasing establishes a supplier delivery due date at the plants 5 days before the product is needed in production. I know Ruchika has established a 2- to 3-day requirement, but I think the requirement is too tight given everything that can happen in transit. Our purchasing system automatically backs off the transit time for shipping to arrive at a supplier ship date.

We have developed a strong, reliable supplier base. We are only late on 4% (versus 7% when I started) of our supplier's deliveries compared with the other divisions which are averaging 8% late. I attribute this to the close working relationship between my purchasing agents, our suppliers, and Alla (Division Materials Manager). Although we review the actual supplier ship date to PO ship date in order to make sure that suppliers are honoring their commitments, my purchasing agents are ultimately evaluated on two key things: percentage of on-time deliveries at the plant dock, and supplier invoiced cost to accepted quote. We thought about evaluating them on the delivered cost which includes both the supplier's charge and freight, but we abandoned the idea because my purchasing agents have no control over the freight costs. And since part of their year-end bonuses are based on the on-time (on the company's dock) delivery performance of suppliers (which can be demotivating if the supplier ships product on time, but the transportation company does not perform), I believe it would be even more demotivating to base their bonuses on costs over which they have no control. Although to be fair, I have to say, our Corporate Traffic Department has selected very reliable carriers and we rarely have a problem.

Alla authorizes priority shipping on all orders expedited by the division. And when necessary, the purchasing agents can also authorize the use of priority shipping, but they are expected to do that only when there is an emergency. Our unwritten policy is that priority overnight shipping should be used only when an order is being expedited.

Overall, I think our relationship with the divisional plants is very good. I heard that the division seems to be having a problem with its inbound freight costs, but that sounds like it is more of a problem for the Corporate Traffic department rather than for us.

At Guillaume's (Division Controller) request, I had my staff prepare all of the information you requested, see Exhibit 3.

5 Interview with the Corporate Director of Traffic, Steven Gruff

Thank you for your interest in learning more about domestic freight. This is how it works. We can ship the product via surface transportation known as trucking companies or via air. We do not use the railroads. If we have less than a truckload of freight, we ship by carriers who are known as LTL (less-than-truckload) carriers. Eighty-six percent of our volume is shipped via LTL. When we have a truckload, say a large order of plastic resins, we can use truckload carriers which generally are more economical. When you ship something, you are just buying space, so the trucking companies charge you primarily based on weight and volume. When you ship you must indicate a freight classification code tied to the type of product and its dimensions/density. Due to our volumes, we have been able to negotiate very favorable rates which average from 10% to 20% lower than the industry. Feel free to check it out.

Of course, on-time performance is every bit as important as cost. A carrier could transport product to a plant for free, but if the delivery is late, we paid too much because production lines go down. Our carriers are currently running at a 97% on-time delivery percentage with 99.4% of all deliveries arriving within 1 day of the committed transit time. And since my area pays all the Corporation's freight bills, I know the freight company billings are 98.9% accurate. So, our divisions are getting their materials on time at the rates we negotiated.

We post the carrier, the rate, and the transit time for each of our primary business lanes in the approved carrier file which is linked to the divisions' purchase order systems. This enables the divisions to determine their costs and when they should request a supplier to ship. The carrier is listed on the purchase orders issued to the supplier.

We utilize 2 national Less-than-Truckload (LTL) trucking companies and 3 truckload carriers with about 13 regional truckers as our core carriers. We also have a variety of local carriers we can rely on based on locale and expectations. If a division adds a new supplier or needs special assistance, we make the arrangements with the appropriate carriers and update the supplier file. Otherwise, the supplier contacts the carrier for pickup. In 2020 we spent over \$20 million in the U.S. for LTL and truckload carriers.

Now, if a division absolutely has to get a product to their plants sooner than the standard transit times quoted by our standard routings, they can use a priority freight carrier. Over here we call that lack of planning. We have selected priority and overnight carriers, both ground, and air, at significantly discounted rates. However, it is important to understand that rates for these carriers can be as much as 6 times higher than our standard carriers. As a company, I think we are out of control when it comes to priority shipping. There are no policies as to its use and last year (2020) we spent over \$7.5 million or 27% of our freight on priority or expedited shipping. Can you believe it, our number one carrier in terms of inbound freight bills is our priority overnight transportation company. I assure you; this would have never happened in the Army.

As I advised Mr. Durbin (Consumer Products Divisional Controller) when he started complaining about his high freight costs last month, it is up to the divisions to effectively manage their domestic freight costs. Suppliers need to properly consolidate, package and ship their products. And divisions need to properly plan their operations. Planning and organization are the keys to minimizing freight costs. For example, you can ship a product across the country in 5 days with our standard routings. To help you better understand freight at LoMax, I asked one of my transportation analysts to prepare a short glossary of terms and responsibilities for freight (See appendix C).

AUDIT PROCEDURES

Your audit approach included an overview of inbound freight costs for material purchases, a walk-through and documentation of internal control policies regarding freight costs, interviews with appropriate divisional and corporate personnel, and a detailed analysis and vouching of the division's 4th quarter freight transactions for 2020. You found that all freight expenditures were accurate and supported by shipping documents, consistent with the rates negotiated by Corporate Traffic, and properly classified, authorized, and approved according to corporate policy.

You also reviewed documentation and performed additional analysis on priority freight shipments authorized by the Division Materials Manager and determined that the expedited shipments were caused by unanticipated customer requests and scheduling emergencies. You requested inventory records so that you could determine when the inventory that was shipped via priority freight was issued to production and found that the average expedited ship date to the

original ship date is 4.5 days early and that on average these orders were received 4.0 days earlier than their scheduled date. The average time from receipt of the shipment to issuing goods to production was 6 hours.

CASE QUESTIONS**Audit-focused questions:**

1. How does the credibility of the internal audit department affect its ability to interact with other corporate divisions?
2. Provide five examples of information gleaned from the interviews that provide insight into the priority freight issue.
3. Prepare an account analysis of the freight account for both the year 2020 and the 4th quarter for the consumer products division. Your analysis should conclude with an estimated dollar amount that was spent on unnecessary priority freight. Hint: Completing an analysis like that found in Exhibit 5 for shipments authorized by the materials manager may be helpful with your analysis. (Optional template is provided).
4. Given the information presented, can you determine what might have contributed to the division's high freight costs? Discuss the control problems with priority freight that you have identified.
5. After reviewing all the case information and your solutions to the previous questions what findings/recommendations would you make to the division? Keep in mind the scope of an operational audit is beyond just financials.
6. Do your findings help to lend credibility to the internal audit department? Why or why not?

Managerial focused questions:

1. Provide five examples of information gleaned from the interviews that provide insight into the priority freight issue.
2. Explain what the term responsibility accounting means and how it applies to LoMax's problem of increased freight costs.
3. Create a divisional income statement for 2018 and 2019, following the calculations used for 2020. Explain what LoMax's corporate office means by "revers[ing] a recent downtrend in operating margin and RoS (Return on Sales)".
4. Review the selling and administrative expense category for 2018 and 2019. What changes/differences do you observe? Why do you think these differences exist? Does this appear to be a likely explanation for the downward trend in profitability? Why or why not?
5. How can a flexible budget be used to better understand the increase in freight costs? Why is this more useful than a static budget?
6. Part of LoMax's competitive advantage is its quick lead times and use of a just-in-time inventory system. Provide an explanation of a just-in-time inventory management system including the advantages and disadvantages. How could supply chain disruptions, such as the recent Covid-19 pandemic or inflation, impact a company that has adopted a just-in-time philosophy?

FOLLOW-UP INTERVIEW AND QUESTION**7.1 Interview with Divisional Purchasing Manager, Philben Bates**

Before finalizing your review for presentation to the Divisional Vice President and Controller, you request a follow-up meeting with the Divisional Purchasing Manager to better understand the procedure for authorizing priority shipments. Mr. Bates' comments are summarized below:

I am not completely certain why we are meeting again. I told you that we have unwritten procedures to use priority freight only as a last resort. My concern is that you are dealing with a tempest-in-a-teapot and that you will try to pin these high freight costs on my purchasing agents. Keep in mind that my group is responsible for procuring over \$90 million in raw materials annually and we have the highest on-time delivery in the company. If we do not have a product on the plant dock when it is requested, the division shuts down. My purchasing agents will do whatever they can to ensure the product arrives on time, no questions asked. Priority freight is a small price to pay to keep the division operating. Now if you have nothing else, I have meetings to attend.

Following that second meeting, you now understand what Durbin meant when he said that inbound freight is a sensitive and emotional issue. As you prepare for your closing meeting with Ruchika Long and Guillaume Durbin,

you wonder if it was the right thing for the department to take on the audit. Maybe Bates was correct, and you are simply creating a tempest-in-a-teapot. Or perhaps you are correct in evaluating your findings and your recommendations will help increase the profitability of the division. You return to preparing for the meeting.

Additional Case Questions:

7. What additional information is gleaned from the follow-up interview with Philbin Bates?
8. Based on the information in the case, discuss how performance measures that do not effectively align individual performance with corporate objectives can lead to individual behavior which is not congruent with the objectives of the company. Why should these metrics be reviewed at the divisional and corporate levels?

Appendix A: Company Background Information¹*A.1 General Company and Industry Information*

LoMax International is a fully integrated designer/manufacturer of electronic and electrical connection systems to original equipment manufacturers (OEMs), commanding an overall 15% share of a \$35 billion global interconnection market. Its 22,400 employees work in 43 countries.

LoMax currently has four major divisions; the Telecom Division which services the telecommunications industry, the Transportation Division that services trucking, automotive, and aircraft manufacturers, the Consumer Products Division which services manufacturers in the consumer products markets, and the Electronic Connections Division that services the computer industry. Its five-year sales growth rate is consistent with the industry rate of 5.5% and its operating income to sales over the past five years averages 12.6%, which exceeds the industry return of 10.4%.

Exhibit 4 presents a sample of LoMax's product line and Exhibit 5 provides financial information by division for 2020, its most recent fiscal year.

A.2 Lomax's Internal Audit Department

LoMax's internal audit department main office is located at the company's headquarters in Reston, Virginia. The department consists of three audit managers, sixteen staff CPAs, three information systems specialists, and three engineers. All CPAs and information systems specialists have public accounting experience with Big Four or national firms and the three engineers have some experience in LoMax's operations. The department reports to the Vice President of Internal Audit who reports directly to the Audit Committee of the Board of Directors with a dotted line responsibility to the company's CEO.

Each year the LoMax Audit Committee approves the internal audit department annual plan. The bulk (70%) of its responsibilities include performing operational audits and special reviews of the company's global operations. The department splits its remaining efforts between financial- and internal-control-reviews that support the annual LoMax's financial statement audit, and special projects.

The members of the department have developed a strong reputation within the company for their ability to objectively and thoroughly analyze and evaluate the areas they audit, and to report their audit findings fairly and in a constructive manner. They have also demonstrated an ability to effectively relate, quantify and communicate the importance of controls to operating management. Their findings have assisted the company in realizing significant cost savings. As a result, members of the Internal Audit department are respected, and the department is considered a source of management talent for the company.

A.3 The Consumer Products Division

The Consumer Products Division manufactures interconnection devices for a wide variety of retail applications ranging from tools to video games to household appliances. The division operates two molding plants, one stamping plant, one plating plant, five assembly plants, and one distribution facility throughout the United States. While the plants are located to support the division's primary US customers, each plant also supplies components to the company's international operations.

The procurement of raw materials is performed by a combination of corporate and divisional purchasing organizations. Corporate Purchasing controls contracts for those items that are strategic to LoMax or for products common to all

¹ This case is based on a real set of circumstances that one of the authors experienced while acting as a senior executive in a Fortune 100 diversified manufacturing company. Names and data values have been altered to preserve privacy and proprietary operating details.

divisions. For products controlled at the corporate level, Corporate Purchasing negotiates annual contracts based on LoMax's total usage and issues a blanket purchase order for each division based on their projected annual usage. Divisional Purchasing initiates deliveries of items negotiated at the corporate level using blanket purchase order releases. Divisional Purchasing also monitors supplier performance and negotiates the procurement of all other purchases for the division including a selection of vendors for any special assembly work. The company purchases all raw materials FOB shipping point due to its ability to negotiate favorable freight rates with its transportation companies.

The Corporate Traffic department is responsible for all aspects of carrier management including the negotiation of all freight rates, the selection of all transportation companies, the monitoring of carrier performance, and the payment of all of the company's freight bills. The Corporate Traffic department selects domestic ground transportation (trucking companies), overnight air freight, document carriers, and international freight forwarders. The department updates purchasing's approved vendor database to designate the appropriate carrier, transit time, and rate for each supplier and lane segment.

Appendix B: Definition of Job Responsibilities

Consumer Products Divisional Accounting Controller-Reports directly to the Divisional Vice President and acts as the controller for all aspects of the Consumer Products Division. Responsibilities include all divisional accounting functions including the analysis and substantiation of all capital requests, preparation of monthly, quarterly, and annual divisional income statements for submission to corporate, development and maintenance of standard costs, budgeting, cost and revenue analysis, and working with corporate and division personnel to develop cost-effective policies and procedure.

Consumer Products Division Materials Manager- Reports directly to Divisional Vice President with a dotted line to the Vice President of Corporate Logistics. Responsible for ensuring that the necessary products are on hand to meet the production schedule.

Consumer Products Division Production Manager-Reports directly to the Divisional Vice President. Responsible for all the production operations at all LoMax's plants.

Consumer Products Division Purchasing Manager- Reports directly to Divisional Vice President with a dotted line responsibility to the Corporate Director of Procurement. Responsible for the procurement of materials for the Consumer Products Division.

Corporate Director of Traffic- Reports directly to the Vice President of Corporate Logistics. Responsible for all aspects of carrier base management for the corporation including rate negotiation, carrier selection, and performance evaluation, and freight bill payment. This applies to all transportation companies that are paid more than \$1,500 annually. This includes domestic and international operations.

Appendix C: Glossary of Domestic Transportation Terms and Policies Relating to LoMax Operations

Expedited Shipping: The term refers to any override of the lowest-cost option undertaken in response to production scheduling exigencies.

Freight Cost Responsibility and Procedures: The corporate traffic department negotiates freight rates for the company based on its overall volume, and then budgets for each division based on its sales volume. Each division has the authority to select the mode of transportation depending upon its delivery needs, and sets policies regarding control and approvals. When LoMax issues a purchase order to a supplier, the supplier is instructed to ship the product according to the standard trucking company selected by the corporate traffic department. The supplier must use the designated carrier unless authorized by the division to change the shipping mode. There are no formal policies or controls within the Consumer Product Division regarding authorization to change shipping mode to more expensive means such as express airfreight. Generally, anyone such as the division materials manager or purchasing agents has the informal authority to change shipping modes when an order must be expedited (rushed) due to an urgent customer or production requirement.

Inbound Freight Costs (IFC): The cost of moving purchased products from a supplier's facility to one of LoMax's production facilities. Freight costs are determined by freight rates which incorporate the distance, weight, type of product (freight class), and dimensions of the product. Freight costs for truckloads are generally the most economical while freight costs for express (overnight) airfreight can be up to 6 times higher than trucking costs. IFC are also referred to as freight in" or (informally) as "freight costs." From an accounting / cost accumulation perspective IFC increase the product cost basis, and thus can. an impact on pricing and profitability.

LTL (Less-Than-Truckload): See interview with Steve Gruff for detail.

Priority Overnight Air Freight (POAF) - This is the most rapid and highest direct cost form of transportation. LoMax employees refer to these shipments with a variety of synonymous terms, including "Air Freight," "Priority Freight," "POAC" and the like.

Shipping Mode: The method used to ship purchased products from a supplier to a LoMax production facility. Domestically, LoMax uses trucking and express airfreight operations to transport purchased raw materials from a supplier to one of its production facilities. LTL versus truckload is determined based on the size of the shipment. The use of trucking versus express airfreight is based on the time-sensitivity of the shipment. As noted above, although the purchase order designates the trucking company to be used, the division has the authority to change the carrier. Each major mode of domestic transportation that LoMax uses is discussed below.

Transit Time: The total elapsed time from pickup at the supplier's facility until arrival at the LoMax production facility receiving dock. Trucking companies generally quote transit times based on zip codes.

Truckload – A truckload carrier will transport an entire trailer-load from the supplier's facility directly to LoMax's production facility. See interview with Steve Gruff for detail.

Figure 1 – Select Financial Information for LoMax Consumer Products Division

	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SALES	51,400.0	57,000.0	53,000.0	61,222.0	62,480.0	67,800.0	53,400.0	60,960.0	67,500.0	63,500.0	68,500.0	78,500.0
COGS	28,171.2	32,713.0	30,171.0	37,012.0	37,094.3	42,565.8	29,300.8	36,817.4	42,435.0	36,828.0	42,005.0	50,905.0
GP	23,228.8	24,287.0	22,829.0	24,210.0	25,385.7	25,234.2	24,099.2	24,142.6	25,065.0	26,672.0	26,495.0	27,595.0
SGA	18,500.0	19,100.0	17,900.0	18,700.0	19,700.0	19,200.0	19,400.0	18,900.0	19,800.0	22,100.0	21,700.0	22,100.0
OPERATING PROFIT	4,728.8	5,187.0	4,929.0	5,510.0	5,685.7	6,034.2	4,699.2	5,242.6	5,265.0	4,572.0	4,795.0	5,495.0
INVENTORY	11,308.0	13,395.0	11,342.0	14,265.0	14,058.0	15,730.0	11,267.0	14,021.0	13,905.0	14,097.0	14,385.0	16,485.0
DOH		137.8	149.6	126.3	139.3	127.7	168.2	125.3	120.1	138.8	123.7	110.7

Figure 2 – 3 Years of Quarterly Operating Data

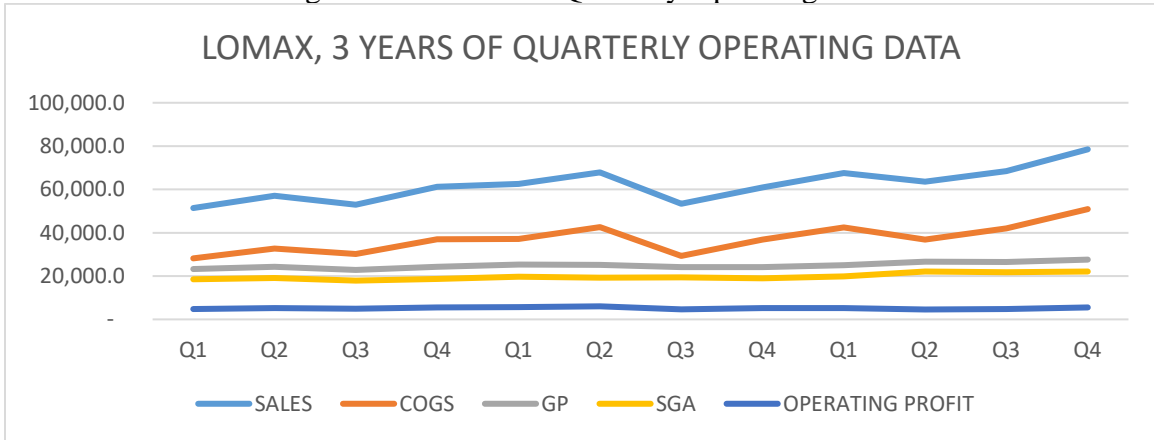


Figure 3 – Consumer Products Inventory

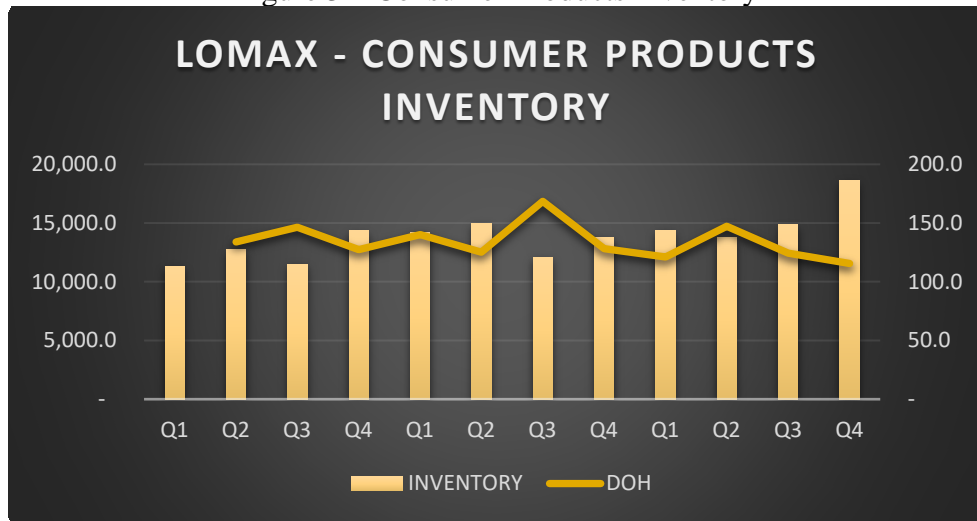


Figure 4 – Division Income Statement

DIVISION INCOME STATEMENT	
	2020
CPD Revenue	278,000.0
COGS	172,173.0
GROSS PROFIT	105,827.0
SGA	85,700.0
EBIT	20,127.0
CAPITAL CHARGE	11,120.0
EBT	9,007.0
TAX EXPENSE	2,251.8
DIVISION NET INCOME	6,755.25

Figure 5
Consumer Products Division
Partial Organization Chart*

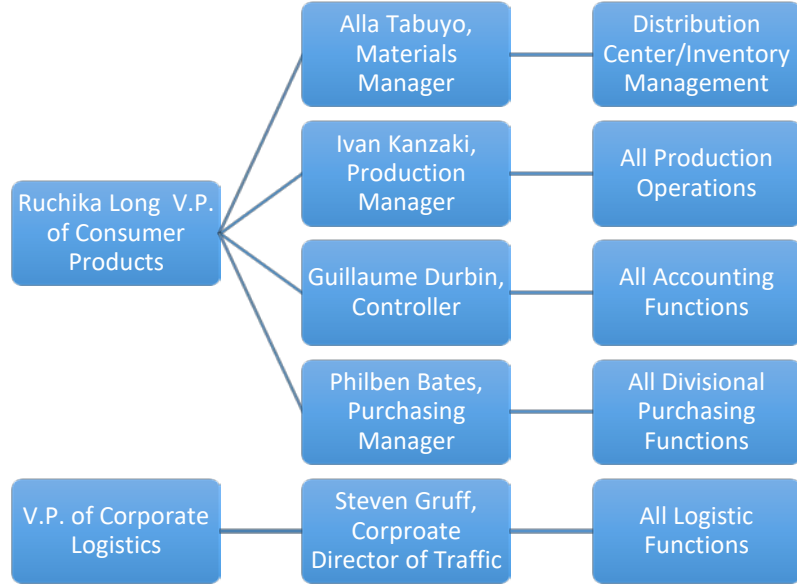


Exhibit 1
LoMax Freight Costs by Division – 2020

Division	LTL/Truckload Freight Costs and Other Freight Costs (\$000s)	Priority/Overnight Air Freight Costs (\$000s)	Total Freight Costs (\$000s)	Freight as a % of U.S. Based Sales	Priority Freight as a % of U.S. Based Sales
Telecom	\$6,752	\$978	\$7,730	0.79%	0.10%
Transportation	6,604	1,263	7,867	0.81%	0.13%
Electronic Connections	8,756	617	9,373	0.76%	0.05%
Consumer Products	1,996	756	2,752	0.99%	0.27%
Total	\$24,108	\$3,614	\$27,722	0.80%	0.10%

Exhibit 2
Consumer Products Division Freight Information
(provided by Corporate Traffic Freight Management System)

	Year 2020	4th Quarter 2020
Total Freight Costs	\$2,752,200	\$814,262
Total Shipments by LTL and Truckload Carriers	3,450	1,035
Total Freight Cost of LTL and Truckload Carriers	\$1,666,350	\$489,555
Total Expedited Shipments by Overnight Carriers	493	151
Other Freight Charges- Samples/Shipments Between Plants	\$329,626	\$81,495
Total Non-Expedited Freight Costs	\$1,995,976	\$571,050
Total Freight Cost of Expedited Shipments	\$756,024	\$243,212
Total Freight Costs	\$2,752,000	\$814,262
Analysis of Expedited Freight by Source by Consumer Products Division		
Acct #63 - Freight Expense per Division Budget Statement	\$2,752,200	\$814,262
Expedited Shipments authorized by Materials Manager		
Number of Shipments	131	46
Freight Cost of Expedited Shipments	\$202,526	\$71,990
Expedited Shipments authorized by Divisional Purchasing		
Number of Shipments	362	105
Freight Cost of Expedited Shipments	\$553,498	\$171,222
Total Freight Costs of Expedited Shipments		
Total Shipments	493	151
Total Freight Cost	\$756,024	\$243,212

Exhibit 3
Summary of 4th Quarter Freight Authorized by Purchasing

Expedited Deliveries	Total Freight Cost	Avg. Priority Freight Cost Per Shipment	Avg. LTL Freight Cost	Avg. Expedited Ship Date to Original Ship Date	Delivered to Plant vs Scheduled Date	Average Time from Plant Receipt to Issuance to Production
105	\$171,222	\$1,631	\$483	1 day late	1.8 days early	4.3 days

Exhibit 4
Sample of LoMax International Interconnection Product Offerings



Exhibit 5
Financial Data for LoMax International – 2020

Market Segment/Division	Market Share	% of Company Revenues	Total Global Revenue (\$000)	Sales Produced in US Plants (\$000)	5 year - Operating Profit Margins
Telecom	16.50%	27.60%	\$1,448,750	\$978,550	13.70%
Transportation	15.00%	28.81%	1,512,500	971,250	12.40%
Electronic Connections	17.00%	34.87%	1,830,750	1,233,225	14.10%
Consumer Products	11.00%	8.72%	458,000	278,000	7.20%
Total	15.50%	100.00%	\$5,250,000	\$3,461,025	12.55%