

CASE: CASE 12.1 Truck Company

HDT Truck Company has been located in Crown Point, Indiana, since 1910. Its only products—large trucks—are built to individual customer specifications. The firm once produced automobiles but dropped out of the auto business in 1924. The firm nearly went out of business in the late 1930s, but by 1940 its fortunes were buoyed by receipt of several military contracts for tank retrievers—large-wheeled vehicles that can pull a disabled tank onto a low trailer and haul it to a location where it can be repaired.

Since World War II, HDT had manufactured only large off-road vehicles, including airport snowplows, airport crash trucks, oil-field drilling equipment, and the like. HDT purchased all components from small manufacturers that were still clustered in the Milwaukee—Detroit—Toledo—Cleveland area. Essentially, all HDT did was assemble components into specialized vehicles containing the combinations of frame, power plant, transmission, axles, cab, and other equipment necessary to do the job. The assembly line was relatively slow. After wheels were attached to the frame and axles, the night-shift labor force would push the chassis along to its next station on the line so it would be in place for the next day's shift. By using one shift, two trucks could be assembled each day. If large orders for identical trucks were involved, it was possible to assemble three trucks per day. Quality declined whenever the pace became quicker.

HDT officials had decided they could not grow and became satisfied with their niche in the very-heavy-truck market. With only two exceptions, since 1970, HDT had always had at least a four-month backlog of orders. In the 1960s, its best market had been airports, but since 1980 its best market had been for oil-field equipment, first for the North Slope in Alaska and then for the Middle East. The U.S. military was also a regular customer.

In late 2002, HDT received an order for 50 heavy trucks to be used in the oil fields of Saudi Arabia. The terms of sale were delivery on or before July 1, 2003, at the Port of Doha, Saudi Arabia. Specifically, HDT would receive \$172,000 per truck in U.S. funds FAS (free alongside ship) at the discharging vessel in Doha, which meant that HDT was responsible for all transportation costs up until the time and point the trucks were discharged from the ship's tackle at Doha. Once each truck was unloaded, HDT would be paid for it.

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Chris Reynolds, production manager at HDT, estimated that production could start approximately April 1, 2003, and the order would take 18 working days to complete.

Because weekends were involved, all 50 trucks would be completed by April 20–25. Reynolds thought that May 1, 2003, was a more realistic completion date because he had always found it difficult to restrict the assembly line to constructing trucks for only one account. The reason for this was that Vic Guillou, HDT's sales manager, liked to have trucks being built for as many accounts as possible on the assembly line at any one time. Prospective buyers frequently visited the plant and were always more impressed when they could see a diverse collection of models being built for a wide range of uses.

Norman Pon, HDT's treasurer, wanted to give priority to building trucks that were being sold on an FOB plant basis because that would improve his cash flow position. At the time the \$172,000 price had been set on the truck sale to Saudi Arabia, Pon had argued (unsuccessfully) that the price was too low. Guillou, on the other hand, argued that the sale was necessary because the Middle East represented a growth market by anyone's definition, and he wanted HDT trucks there. HDT's president, Gordon Robertson, had sided with Guillou. Robertson thought that Pon was a good treasurer but too much of a worrier when it came to making important decisions. Pon, in turn, thought that Robertson had yet to shed the image he had acquired in the 1980s when his late father was president of HDT. Pon had lost count of the number of times the elder Robertson had needed cash to buy his son's way out of some embarrassing situation. Guillou was young Robertson's fraternity roommate in college, and Pon thought the two of them shared a similar love of life in the fast lane.

At the time the order was signed in 2002, Guillou argued that the FAS destination port represented the best terms of sale because ocean charter rates were declining as a result of an oversupply of tonnage. Guillou predicted that by mid-2003 charter rates would be so low that the cheapest method of transport would be to load all 50 trucks on one vessel. Pon countered that HDT should try to make a profit only from the manufacture of trucks because nobody in the firm knew much about ocean shipping. Robertson, who was a gambler at heart, disagreed.

In March 2003, Reynolds had the 50-truck order scheduled to be on the line from April 2 to 29, which represented 2.5 trucks per working day. Other work was scheduled for the assembly line at the same time, so the production schedule was considered firm. Component parts for the oil-field trucks and for the other trucks were already arriving. Orders were backlogged for over seven months, the highest figure since 1989. This was due, almost in total, to Guillou's additional sales of oil-field equipment to Middle Eastern producers. Three separate orders were involved and totaled 115 trucks.

Robertson and Guillou left Crown Point for an industry convention in San Diego. Robertson phoned from San Diego that he and Guillou had decided to vacation in

Mexico for a while before returning to Crown Point. Robertson knew that HDT could function in his absence and knew that with Pon overseeing operations, the company's assets would be safe. Several days later, a Mexican postcard postmarked in Tijuana arrived, saying that both were enjoying Mexico and would stay longer than initially planned.

Pon was relieved to learn that Guillou and Robertson would be gone for a longer time and immediately began wondering what types of bills they were accumulating in Mexico and for which ones they would want company reimbursement. Both had several credit cards belonging to the company. Based on experience, Pon also expected Robertson to phone on his cell phone for a cash advance or transfer about once a week. (Robertson did not want charge records generated for some of his expenses.)

As usual, Pon started wondering how paying for the Robertson and Guillou vacation venture would affect HDT's cash flow. Pon looked at his cash flow projections, which were always made up for six weeks in advance, in this case through the first of April, when some of the bills for components of the oil-field trucks would come due. In fact, if Reynolds's schedule were adhered to, all the components would be on hand by April 10, and if HDT were to receive the customary discounts, all of the components would have to be paid for in the period between April 8 and April 20 (HDT received a 1 percent discount for goods paid for within 10 days of actual or requested receipt, whichever came later). For a moment, Pon thought that the worst might happen: The component bills would be due at the same time as Robertson's and Guillou's request for a hefty cash advance. He called the Crown Point Bank and Trust Company, where HDT had a line of credit, and learned that the current rate was 8 percent per annum. He then asked Bob Vanderpool, who was HDT's traffic manager, when the oil-field trucks would arrive in Saudi Arabia.

"I don't know," was Vanderpool's reply. "I assumed that Guillou had arranged for transportation at the time 228229you decided to charge \$172,000 per truck, but I'll check further." He did and phoned back to tell Pon that Guillou's secretary could find nothing in the files to indicate that Guillou had checked out charter rates. "That figures," muttered Pon. "Would you mind doing some checking?" Vanderpool said he *would* mind doing some checking. Pon then suggested to him that there were several other newer orders also destined for the Middle Eastern countries so Vanderpool should start thinking about widening his area of expertise. Vanderpool reluctantly agreed, and Pon heard nothing until Vanderpool passed him in the hall a few days later and said the assignment was much more time consuming than he had imagined. One week later, Vanderpool said he had done as much as he could and would turn the figures over to Pon. Vanderpool also said that he did not have the authority to charter a ship and suggested that Pon determine who could do so in

Robertson's absence. Later that day, Vanderpool came to Pon's office with a thick file.

"It looks like you've been doing a lot of figuring," said Pon.

"No, not me," said Vanderpool, "but two outsiders. One is Bob Guider, an international freight forwarder in Chicago whom we use for our export parts shipments. And he put me in touch with Eddie Quan, a New York ship broker who is on top of the charter market. We have two alternatives."

"What are they?" asked Pon. "Well," answered Vanderpool, "the St. Lawrence Seaway will open in mid-April, so we could use it. The problem is that the Seaway route is circuitous, especially to reach the Middle East. Also, there aren't many scheduled Seaway sailings to that area, and because the Seaway will just be opening again, cargo space is hard to come by. Therefore, if we're not going to charter a ship, the best bet is to use Baltimore."

"What about chartering a ship?" asked Pon. "Why not use Baltimore for that?"

"In theory, we could," answered Vanderpool. "But Quan says the size of ship we want is rather small and not likely to be sailing into Baltimore. We could arrange to share a ship with another party, but many bulk cargoes are pretty dusty and might not be compatible with our vehicles. Quan says there is one foreign vessel entering the Great Lakes in April that is still looking for an outbound charter. Seaway vessels, you know, are smaller because of the lock size restrictions. If we want to charter that vessel, we'll have to move quickly, because if somebody else chartered her, she's gone."

"What kind of vessel is it?" asked Pon.

"The vessel's name is the *Nola Pino*, the same name as a French movie actress of the 1960s. You may recall that some Greek shipping magnate named the vessel after her, but his wife made him give up both *Nola Pino* the actress and *Nola Pino* the ship. At present, it's scheduled to be in Chicago the last week in April with a load of cocoa beans and ready for outbound loading May 1. Quan thinks we could charter it for \$2,400 per day for 30 days, which would be enough time for it to load, transit the Seaway, reach Doha, and discharge the trucks by May 29 or 30."

"Tell me about the alternative," said Pon. "Baltimore has fairly frequent sailings to the area we want to reach," said Vanderpool. "We could load two trucks per day on railcars here and send them to Baltimore. Two ships a week are scheduled from Baltimore to Doha. It would take the trucks an average of 4 days to reach Baltimore, where they would wait an average of 3 days to be loaded aboard ship. The figure

should be 3.5 days, but the railroad will hustle if it knows we're trying to connect with an outgoing sailing. Sailing time to Doha averages 15 days—a little more, a little less, depending on the amount of cargo to be handled at ports in between.”

“That averages 22 days per truck,” stated Pon, who had been putting the figures in his calculator. What are the charges?”

Vanderpool answered, “It costs \$120 to load and block two trucks on a flatcar, which is, of course, \$60 apiece as long as they move in pairs. Sticking to pairs, the rail rate for two on a flatcar totals \$1,792 to Baltimore. Handling at Baltimore is \$200 per truck, and ocean freight rate from Baltimore to Doha is \$1,440 per truck. We also have to buy insurance, which is about \$150 per truck.”

“That totals \$2,790,” said Pon, after consulting his calculator. “What are the costs if we charter the *Nola Pino*? You said it could be \$72,000 for the vessel. What else is involved?”

“There are two ways of getting the trucks to port,” said Vanderpool. “The loading and blocking would be only \$40 per truck because we'd be doing all 50 at one time. The rail rate per truck would average out to \$180 each, and it would take 1 day for them to reach Chicago and another day to be loaded. We'd be tying up a wharf for 1 day, and the wharfage charge runs \$2 per foot, and the *Nola Pino* is 535 feet long. We'd be responsible for loading and stowing the cargo, and this would cost \$4,000 for all 50 trucks. The Seaway tolls are \$1.80 cents per ton or, in our case, \$54 per truck. At Doha, the unloading costs will be \$4,200 for the entire vessel. Marine insurance will be \$210 per truck.”

“Are there any other alternatives?” asked Pon.

“The only other one that comes close is to drive the trucks from here to Chicago,” answered Vanderpool. “We would need temporary licenses and a convoy permit and pay to have the fuel tank on each truck drained before it is loaded. The problem is that the convoy would cross state lines, and we would need temporary licenses and permits in Illinois as well. We'd also need 50 drivers and have to pay for their time and for their trips back home.”

“Do me one favor,” said Pon. “Please call Frank Wood, our outside counsel, and ask him what steps we have to go through to charter a ship. Tell him I'm especially concerned about the liability. Give him Quan's phone number. I want to make sure there are no more costs involved. If Robertson's fooling around is on schedule, he'll be wanting me to wire him some cash. I'd really appreciate it if you would summarize what you've told me in two columns, with the charter costs on the left and the

overland Baltimore cost column on the right. Then when Robertson calls, I can ask him to decide.”

“One question,” asked Vanderpool.

“Shoot,” responded Pon.

“Why should the charter figures be on the left?”

“Because on a map (see Exhibit 12.A), Chicago is to the left of Baltimore and that’s the only way I’ll keep them straight when I’m talking on the phone.”

FIGURE 12.A Map of the Northeastern United States



Questions

- 1. Assume you are Vanderpool. Draft the comparison Pon just requested.
- 2. Which of the two routing alternatives would you recommend? Why?
- 3. Assume that the buyer in Saudi Arabia has made other large purchases in the United States and is considering consolidating all its purchases and loading them onto one large ship, which the buyer will charter. The buyer contacts HDT and, although acknowledging its commitment to buy FAS Doha, asks how much HDT would subtract from the \$172,000 per truck price if the selling terms were changed to FOB HDT’s Crown Point plant. How much of a cost reduction do you think HDT should offer the buyer? Under what terms and conditions?

- **4.** Answer Question 3 with regard to changing the terms of sale to delivery at port in Baltimore. The buyer would unload the trucks from the railcars.
- **5.** Is there an interest rate that would make HDT change from one routing to another? If so, what is it?
- **6.** Assume that the cost to HDT of borrowing money is 12 percent per year. Because the buyer will pay for trucks as they are delivered, would it be advantageous for HDT to pay overtime to speed up production, ship the trucks as they are finished via the Port of Baltimore, and collect its payment earlier? Why or why not?