Dawn Treader Industries: Long-Term Construction Contracts: Problem Handouts

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Phase 1

Dawn Treader Industries (DTI) is a closely held company engaged in the design and building of assembly lines for large manufacturing companies. The assembly lines are built to specifications provided by the customers. In each case a contract is signed for the design and building of the assembly line. DTI began operations in the year 2000 when its founder, Ray Jammes, left a large engineering consulting firm to form the company.

In June 2000, DTI signed a contract with Aslan Company, a large manufacturer of construction equipment. At year-end this is the sole job that DTI is working on. In order to procure additional contracts, Ray believes DTI must raise additional capital.

Ray has hired your firm to conduct an audit of DTI's financial statements to be submitted to his bank so he can raise the additional capital. The partner in charge of the audit has asked you to ascertain the proper accounting for the contract with Aslan Company.

Directions:

This is a problem based learning exercise.

1. What alternatives exist for the accounting for this contract?
2. What information do you need to account for this contract in the proper manner?
3. Use the PBL worksheet to record the information that you know and the information that you will need to find.

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Phase 2

When you examine the financial records of DTI, you are satisfied that the company has reasonable estimates as to the extent of progress toward the completion of the contract and the costs necessary to complete the job. The contract is a fixed fee contract with a price of $5,000,000. During the year 2000 DTI has incurred $1,250,000 in costs for the Aslan assembly line. DTI engineers estimate that an additional $3,000,000 will be expended to complete the job. Under the terms of this contract, Aslan will be billed for the job after completion.

DTI uses the following bookkeeping conventions to account for its long-term construction contracts: All costs associated with the projects are accrued as construction expenses as they occur. When DTI bills the customer, it credits construction revenue for the full amount. At year end, the auditor suggests adjustments that must be made in order to conform to authoritative pronouncements.

Directions:

1. What journal entries did DTI make during the year with respect to the Aslan contract?
2. What are the effects on the income statement and balance sheet for the contract?
3. What adjusting journal entries must be made?

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Phase 3

At year-end 2001 you find yourself once again examining the books of DTI. During the year DTI expended an additional $2,300,000 on the Aslan contract. Company engineers and cost accountants have revised their estimates of the total project cost. They now believe that an additional $800,000 will have to be spent to complete the project.

Directions:

1. Complete the journal entries for the Aslan project in 2001.
2. What amounts will be shown on DTI's income statement and balance sheet with respect to this project?

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Phase 4

In January 2001, DTI was contacted by Crosley Industries, a large, Fortune 500 company engaged in the manufacture of household appliances. Crosley wanted DTI to design an assembly line in its Brookville, IN plant to manufactures a new part for its washing machines.

From January through May, DTI made preliminary plans for the Brookville assembly line spending $75,000 in the process. On July 1, Crosley approved the preliminary plans and signed a contract with DTI.

Directions:

This is a problem-based learning exercise.

1. What information do you need to properly account for this contract at year-end?
2. Where would you find this information?

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Phase 5

When you examine the terms of the contract signed by DTI and Crosley you find the following provisions:

1. The contract price was $10 million. Under the terms of the contract Crosley, agreed to pay half the price upon notification that the project was 10% complete. An additional 25% would be paid when the project was 60% complete. The remainder would be paid upon completion.
2. Internal estimates by DTI indicated that this contract would ultimately cost the company $8,000,000 to complete.
3. The contract contained a provision whereby Crosley could place the project on permanent hold at the discretion of Crosley. In the event Crosley put a permanent hold on the project, Crosley had thirty days to inform DTI to continue work or to stop all work, which amounted to a cancellation of the project.
4. In the event that a stop all work order was issued, Crosley would reimburses DTI for all costs incurred up to the date of the permanent hold. Under the terms of the contract DTI would make an accounting of all costs incurred up to the permanent hold. Crosley reserved the right to conduct a "value audit" of these costs using its internal auditing staff. Any payments received by DTI in excess of these costs were to be returned to Crosley.
5. DTI had a long-standing policy to charge customers a penalty for business disruption in the event of a cancelled order. Normally the penalty was 10% of the contract price. This policy was mentioned in the original proposal given to Crosley, but it was not specifically addressed in the contract itself.

When you examine the records of DTI, you find the following expenditures associated with the Crosley Contract:

Engineering	$1,400,000
Purchases of raw materials	$900,000
Manufacturing of assembly line components (labor and overhead)	$1,341,000
Assembly and testing at the Brookville site	$252,000

On September 1, 2001, DTI notified Crosley that 10% of the work on the project had been completed. Accordingly, they requested payment under the terms of the contract. On October 1, 2001 DTI received a check for $5 million.

Directions:

1. Assuming the project was 15% complete at the year-end (December 31, 2002) what journal entries should be made with respect to the Crosley contract?

2. What amounts will be shown on the income statement and balance sheet of DTI with respect to the two construction contracts?

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Phase 6

During January, before you have made the closing entries, you discover some additional information that was unknown to you when you made the journal entries called for in Phase 5. On November 15, 2001 Crosley notified DTI that it was placing the project on permanent hold under the terms of the contract. On December 10, 2002, Crosley issued a stop all work order and requested an accounting of all costs for the project. DTI estimated that approximately $50,000 of the material it had purchased could be returned to the original manufacturer. The remainder had either been used in DTI's manufacturing process or were so specialized that the right of return did not exist.

The controller of DTI informs you that the company expects to incur $250,000 in labor costs to negotiate shutdown, inventory assembly line components, crate these components, and ship them back to DTI's warehouse. The controller believes these are legitimate costs of the project and states they will be part of the costs reported to Crosley.

The controller also informs you that he plans to request the 10% disruption of business penalty from Crosley. He also believes that the $75,000 spent to acquire the contract should be recoverable.

As of the close of business at year-end, Crosley had not requested a value audit. In fact, no value audit had been requested during the subsequent events period before the publication of the financial statements. The contract is not considered officially terminated until the value audit has been completed.

When you talk to the controller about these events, he confesses that he is unclear as to the proper accounting treatment and he solicits your advice.

Directions:

1. Develop three alternatives for accounting for this event to present to management.
2. Make a recommendation as to which alternative to choose.
3. Provide the journal entries for your proposed solution, assuming that the entries called for in Phase 5 have already been made, but that the books have not been closed.

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Phase 7

At year-end 2002, you are once again engaged on the DTI audit. When you look at the records concerning the Aslan contract you discover that the job was finished during the year and delivered to the customer. The engineers were quite pleased to report that the costs of the job had come in well below what they had expected. They had spent $650,000 to complete the assembly line. DTI sent a bill to Aslan when the job was completed and Aslan had paid the full amount.

Directions:

1. Record the journal entries that DTI made for the Aslan contract during the year.
2. Record the adjusting entries that must be made at the end of 2002.

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Phase 8

During the course of your year-end work, you discover that DTI had landed another large assembly line contract in 2002. This one was with Lewis, Ltd. It was another fixed fee contract with a price of $6,000,000. 10% of the price was paid at the signing of the contract. The remainder will be paid in full when the assembly line is up and running. DTI engineers estimated that the cost to complete this assembly line would be $5,500,000. Because of the specialized nature of this assembly line, 60% of the costs will be in the form of materials. DTI has purchased all the materials and stored them on site. No labor or overhead has been expended on the project.

Your client is quite pleased with the financial results of the Lewis contract. "Since we have incurred 60% of the costs, I anticipate booking a great deal more revenue on this contract when you make your percentage of completion adjustments," the controller exclaims.

Directions:

1. Record the journal entries that DTI made for the Lewis contract during the year.
2. Record the adjusting entries that must be made at the end of 2002.

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PBL Worksheet

Group: ___________________ Date: _____________________

What do we know?	What do we need to know?	How will what we know or what we need to know help us solve this problem?

What have we learned?		