

**CHAPTER 15**  
**ACCOUNTING PERIODS AND METHODS**  
**SOLUTIONS TO PROBLEM MATERIALS**

<u>Question/ Problem</u>	<u>Topic</u>	<u>Status: Present Edition</u>	<u>Q/P in Prior Edition</u>
1	Tax year: natural business year	New	
2	Tax year: S corporation	Unchanged	2
3	Tax year: personal service corporation	Unchanged	3
4	Restoration under claim of right doctrine	Unchanged	4
5	Cash method	Unchanged	5
6	Accrual basis: who must use	Unchanged	6
7	Cash method: grocery store	Unchanged	7
8	Cash versus accrual method	Unchanged	8
9	Issue ID	Unchanged	9
10	Accounting method: timing of deduction	New	
11	Use of reserves	Unchanged	11
12	Installment method: benefits	Unchanged	12
13	Installment method: related parties	Unchanged	13
14	Installment method: electing out	Unchanged	14
15	Long-term contracts	Unchanged	15
16	Long-term contracts: length	Unchanged	16
* 17	Partnership tax year	Unchanged	17
18	Fiscal year: personal service corporation	Unchanged	18
* 19	Change in tax year: short-period tax	Unchanged	19
20	Cash versus accrual method: tort and breach of contract	Unchanged	20
21	Cash and accrual basis expenses and income	Modified	21
22	Accrual method: required use	New	
23	Accrual basis: all-events test and economic performance test	Unchanged	23
24	Change in accounting method: § 481 adjustment	New	
* 25	Installment method: benefits	Unchanged	25

<u>Question/ Problem</u>	<u>Topic</u>	<u>Status: Present Edition</u>	<u>Q/P in Prior Edition</u>
* 26	Installment method: calculations	Unchanged	26
* 27	Installment sales: imputed interest	Modified	27
* 28	Installment sales between related parties	Unchanged	29
* 29	Disposition of installment obligations	Unchanged	30
30	Long-term contracts: completed contract method	Modified	31
31	Long-term contracts: capitalization versus expense and percentage of completion method	Unchanged	32
32	Long-term contract methods	Unchanged	33
33	Long-term contract methods	Unchanged	34
* 34	Percentage of completion method: lookback	Unchanged	35

\*The solution to this problem is available on a transparency master.

## CHECK FIGURES

- |       |   |       |   |
|-------|---|-------|---|
| 17.a. | FYE March 31.   | 26.a. | Total gain \$22,500; contract price \$45,000; collections \$19,000; recognized gain \$14,700. |
| 17.b. | FYE June 30.  | 26.b. | Contract price \$47,500; collections \$21,500.  |
| 18.a. | \$45,000.   | 27.a. | \$172,231.  |
| 18.b. | Deduction limit \$120,000.  | 27.b. | \$27,108.   |
| 19.   | \$5,603.  | 28.   | \$192,000.  |
| 21.a. | Deduction \$44,000 under both methods.                                  | 29.a. | Gain \$45,000.  |
| 21.b. | Accrual income \$12,000; cash basis income \$10,000.                    | 29.b. | Gain \$15,000 from Jan. 1 payment.  |
| 21.c. | Accrual deduction \$0 for 2003; cash basis deduction \$30,000 for 2003. | 29.c. | Gain \$30,000.  |
| 21.d. | Accrual and cash basis deduction \$47,002.                              | 30.a. | 2003 profit \$310,000; 2004 deduction \$70,000.   |
| 22.   | Only c., d., and e. must use accrual method.                            | 30.b. | \$70,000 loss deferral until 2004.  |
| 23.   | Total 2003 expense \$2.2 million.                                       | 32.a. | Not long-term contract.   |
| 24.   | § 481 negative adjustment of \$190,000 is required.                     | 32.b. | Not long-term contract.   |
| 25.   | Option 1 \$79,281; option 2 \$81,766.                                   | 32.c. | Completed contract.   |
|       |   | 34.a. | 2003 \$200,000; 2004 \$300,000.   |
|       |   | 34.b. | \$4,008.  |

## DISCUSSION QUESTIONS

1. May 31st would be immediately after the close of the natural business year. The individual income tax returns for the preceding calendar year would be completed, except for those under extensions, and much of the receivables would have been collected. p. 15-5
2. Because the S corporation will have losses for the first two years, it seems likely that the loss for the first tax year ending September 30th will be less than the loss for the first tax year ending on December 31st. By using a fiscal year ending September 30th, the loss that will be reported on the individual shareholder's calendar year return would be less for the short period ending on that date than if the tax year ended December 31st. Also, once the corporation begins to show a profit, the shareholder will be required to make "required tax payments" if the year ending September 30th is used. pp. 15-4 and 15-5
3. The ideal tax year would end on January 31, and the salary would be paid each January. Thus, in 2003 the corporation could pay \$25,000 salary, which would eliminate the corporation's taxable income. The medical doctor would report salary of \$25,000 for 2003. For the fiscal year ending January 31, 2004, the corporation would pay \$300,000 salary in January 2004, and that would be the doctor's salary income for the calendar year 2004. If the corporation used the calendar year to report income and paid the salary in December, the doctor would have \$300,000 salary income in 2003 and in 2004. Thus, as compared to using a calendar year, the doctor will always have \$275,000 of deferred income by using a fiscal year. pp. 15-6 and 15-7
4. At first glance, it appears that Freda is getting a bad result. However, Freda was treated quite well by the system of an annual accounting period. Her income for 2003 was overstated because of the overcharge error and this caused her to have less taxable income in 2004 under § 1341. In effect, Freda is allowed to take the 2004 deduction at the same tax rate as the income was taxed in 2003 (35%). On the other hand, Freda took a deduction for state income taxes that yielded greater tax benefit (35% rather than 15%) in 2003 than the tax on the recovery in 2004 (15% rather than 35%). p. 15-10
5. The cash method would enable Cardinal to defer income in the first year of operations. The deferral would equal the accounts receivable less the accounts payable at the end of the first year. However, while the deferred amount is included in income for year 2, the year 2 receivables less accounts payable will be deferred until year 3. This process on a one-year deferral will continue until the last year of Cardinal's operations. Thus, for all practical purposes, the first year deferral available with the cash method is permanent assuming the accounts receivable and the accounts payable relationships remain the same. pp. 15-11 and 15-12
6. The cash basis taxpayer can deduct the premiums in 2003 because the prepayment does not extend beyond the end of the succeeding tax year (i.e., one year rule for prepaid expenses). p. 15-11
7. Generally, a grocery store must use the accrual method of accounting because inventories are an income-producing factor to the business. However, the taxpayer may qualify for the *small taxpayer exception* and use the cash method. The exception applies to taxpayers with average annual gross receipts (calculated over the most recent 3 years) of not more than \$1 million. p. 15-12

8.
  - a. Fixed assets are accounted for in the same manner by both cash and accrual basis taxpayers. They are capitalized and depreciated (or cost recovery allowances are claimed) over their depreciable lives. p. 15-11
  - b. Prepaid rental income must be included in gross income in the year of receipt by both cash and accrual basis taxpayers. The taxpayer who makes the prepayment generally must capitalize the amount, regardless of the prevailing accounting method. See Chapter 3.
  - c. Cash basis, as well as accrual basis, taxpayers must capitalize and amortize prepaid interest expense. p. 15-11 and Chapter 9
  - d. A cash basis taxpayer must include the fair market value of the note in gross income. An accrual basis taxpayer would include the face amount of the note, the amount that he or she has a right to receive. The cash basis taxpayer subsequently would include in gross income any amounts that are received in excess of the fair market value of the note on the date of receipt. See Chapter 3.
9. A partnership with a corporate partner must use the accrual method of accounting. The partnership would be a new entity and would be required to elect to use the accrual method (no change in accounting method will be required). The same type of income that Edgar formerly reported by the cash method must now be reported on the accrual method. p. 15-11
10.
  - a. In the second year, there will be no difference in the expense as computed by the two methods. Under the “current deduction” method (i.e., in effect the cash method), \$500,000 is deducted for current year purchases. Under the “expense as used” method (in effect the accrual method), \$250,000 is deducted associated with first year purchases and \$250,000 is deducted associated with second year purchases.
  - b. In the last year the company is in business, under the “expense as used” method, the deduction will be \$500,000 assuming the company purchases the amount needed for the last one-half of the year. The “current deduction” method will result in only a \$250,000 deduction for the supplies purchased for the last one-half of the final year.

pp. 15-16 to 15-18
11. The use of reserves requires accruing a cost or expense before all the events that determine the taxpayer’s liability have occurred. Apparently, Congress believes the use of reserves would create too many opportunities for tax deferrals. pp. 15-13 to 15-16
12. If Sara sells for cash, she must pay tax on the entire gain in the year of sale and then invest her after-tax proceeds. With an installment sale, she is earning interest on \$150,000 although some of the uncollected proceeds represents deferred gain. In other words, with the installment sale, Sara is earning 9% interest on the deferred taxes. pp. 15-18 to 15-25
13. Son’s sale would occur within two years of the date on which he purchased the land. Therefore, Father must treat payments received by Son as if received by him and accelerate his reporting of the installment sale gain. Son is allowed to recognize his own realized gain by the installment method.

If Son's sale occurred after June 1, 2003 (more than two years after the date on which he purchased the land from Father), the related-party rules would not apply and Father could continue to report his gain as collections are received from Son.

pp. 15-22 and 15-23

14. Juan Corporation should elect to forgo the use of the installment method to report the gain of \$120,000 (\$200,000 – \$80,000). The \$120,000 recognized gain will be partially absorbed by the \$90,000 capital loss carryover that would otherwise expire in 2003.  
pp. 15-18 and 15-25
15. The completed contract method defers income until the contract is completed. The alternative, the percentage of completion method, requires the taxpayer to report revenues each year as costs are incurred on the contract. Therefore, the completed contract method defers income for contracts in progress at the end of the year. The percentage of completion method must be used for tax purposes unless the taxpayer qualifies for either the (a) home construction contracts (contracts in which at least 80 percent of the estimated costs are for dwelling units in buildings with four or fewer units) exception or (b) the small contractor exception (i.e., the contract is expected to be completed within the two-year period beginning on the commencement date of the contract and the contract is performed by a taxpayer whose average annual gross receipts for the three taxable years preceding the taxable year in which the contract is entered into do not exceed \$10 million). pp. 15-26 to 15-28
16. With the reduction in the length of the production period, the company can use the accrual method of accounting rather than the percentage of completion method. Thus, the company would no longer be required to accrue as income the profits on contracts in process at the end of the period. Also, the company would not be required to capitalize interest during the production period. pp. 15-26 and 15-28

## PROBLEMS

17.
  - a. Since the majority interest partners' rule is satisfied (i.e., Red, who has a 60% interest, is the majority interest partner), the partnership must have the same tax year as Red (i.e., fiscal year ending March 31).
  - b. Since neither the majority interest partners' rule nor the principal partners' rule is satisfied, the least aggregate deferral method must be used in determining the partnership tax year.

### Test for Fiscal Year Ending September 30

<u>Partner</u>	<u>Year Ends</u>	<u>Profit %</u>	<u>Months of Deferral</u>	<u>Product</u>
Red	9/30	30	0	0
Blue	1/31	30	4	1.2
White	6/30	40	9	<u>3.6</u>
Aggregate deferral months				<u>4.8</u>

Test for Fiscal Year Ending January 31

<u>Partner</u>	<u>Year Ends</u>	<u>Profit %</u>	<u>Months of Deferral</u>	<u>Product</u>
Red	9/30	30	8	2.4
Blue	1/31	30	0	0
White	6/30	40	5	<u>2.0</u>
Aggregate deferral months				<u>4.4</u>

Test for Fiscal Year Ending June 30

<u>Partner</u>	<u>Year Ends</u>	<u>Profit %</u>	<u>Months of Deferral</u>	<u>Product</u>
Red	9/30	30	3	.9
Blue	1/31	30	7	2.1
White	6/30	40	0	<u>0</u>
Aggregate deferral months				<u>3.0</u>

Therefore, because the least aggregate deferral is for the fiscal year ending June 30, this will be the fiscal year-end for the partnership.

pp. 15-3 to 15-5

18. a. Zack should receive  $3/12 \times \$180,000 = \$45,000$  salary. Example 5 and p. 15-6
- b. Because Zack received only \$30,000 salary, the corporation's deduction for the fiscal year ending September 30, 2003 is limited to \$120,000 [ $\$30,000 + \$30,000[(12 - 3)/3]$ ] even though Zack may receive more than \$120,000. Example 6 and p. 15-6
19. The annualized income for the period October 1 through January 31 (four months) is calculated as follows:

$$\$28,000 \times \frac{12 \text{ months in the year}}{4 \text{ months in the short period}} = \$84,000$$

Tax on	\$50,000	X .15	=	\$ 7,500
Tax on the next	25,000	X .25		6,250
Tax on the next	<u>9,000</u>	X .34		<u>3,060</u>
	<u>\$84,000</u>			<u>\$16,810</u>

The tax for the short period is calculated as follows:

$$\$16,810 \times \frac{4}{12} = \$5,603$$

pp. 15-7 and 15-8

20. Willis, Hoffman, Maloney and Raabe, CPAs  
5191 Natorp Boulevard  
Mason, OH 45040

October 1, 2003

Mr. Jeff Stuart, President  
Gold, Inc.  
200 Elm Avenue  
San Jose, CA 95192

Dear Mr. Stuart:

I was sorry to hear about the mishap with the chemical spill. Under the tax law, such events are considered "ordinary." The payments for actual damages are deductible. The payments for punitive damages, should you be required to pay them, are probably not deductible.

To the extent the damage payment is deductible, the deduction will not be allowed until you actually pay the claim. The same holds true for the \$15,000 breach of contract payment. In other words, the tax law treats the accrual basis taxpayer and the cash basis taxpayer the same in cases of tort and breach of contract claims. If you have any further questions, please give me a call.

Sincerely,

Walter Saxon, CPA  
Tax Partner

pp. 15-13 to 15-15

21. a. The amount of the deduction (i.e., for cost recovery) of \$44,000  $[(\$100,000 \times 30\%) + .2(\$100,000 - \$30,000)]$  is the same under the cash or accrual basis. p. 15-11
- b. Both the accrual and cash basis taxpayers must report the \$10,000 prepaid rental income in 2003. In addition, the accrual basis taxpayer must report in 2003 the \$2,000 accrued rents collected in January 2004. The cash basis taxpayer would report the \$2,000 in 2004 when it is collected. See Chapter 3.
- c. The cash basis taxpayer can deduct the prepaid insurance of \$30,000 in 2003. The accrual basis taxpayer must capitalize the prepaid insurance in 2003 and deduct the insurance in 2004. pp. 15-11 to 15-14
- d. The statutory ceiling on § 179 expensing in 2003 is \$25,000. Thus, both the cash and accrual method taxpayer would deduct \$25,000 of § 179 expense. The deduction for the 30% additional first-year depreciation would be \$16,500  $[(\$80,000 - \$25,000) \times 30\%]$ . In addition, the deduction for regular MACRS cost recovery is \$5,502  $[(\$80,000 - \$25,000 - \$16,500) \times 14.29\%]$ . So the total deduction in 2003 is \$47,002  $(\$25,000 + \$16,500 + \$5,502)$ . p. 15-11
22. The consulting firm in a. is not required to use the accrual method because it is a service business, even though it is incorporated and has gross receipts in excess of \$5 million.

The law has an exception for consultants and certain other professionals, where the entity is controlled by the professionals. The manufacturer in b. is not required to use the accrual method because its gross receipts are less than \$1 million. The unincorporated manufacturer in c. is required to use the accrual method for sales and cost of goods sold because the sale of goods is an income-producing factor to the manufacturer. The unincorporated grocery store in d. is required to use the accrual method for sales and cost of goods sold. The incorporated hardware store in e. is required to use the accrual method for sales and cost of goods sold. pp. 15-11 and 15-12

23. Willis, Hoffman, Maloney, and Raabe, CPAs  
5191 Natorp Boulevard  
Mason, OH 45040

November 18, 2003

Mr. Gerald Fine, President  
Beige Products Manufacturing Company  
905 Mason Drive  
Floyd, VA 24030

Dear Mr. Fine:

You asked me to explain the tax consequences of the company's rebate program. The cost of the rebates will reduce taxable income. The full sales price will be included in gross income for the year of the sale. Then the rebates will be deducted as expenses. The year in which the deductions can be claimed is governed by the "all-events" and "economic performance" tests.

Under the all-events test, a deduction can be taken no earlier than when the customer asks for a rebate. That is, the request for the rebate is the crucial event. Possible rebate requests cannot be anticipated at year end. Under the all-events test, the maximum deduction will be \$2,200,000 (44,000 X \$50).

However, under the economic performance test, generally the deduction is not allowed until the rebate has been paid. As of the end of 2003, the company had paid only 43,000 of the requests. Thus, the economic performance test would appear to limit the 2003 deduction to \$2,150,000 (43,000 X \$50). An exception to this payment requirement exists in the case of recurring items.

Generally, the recurring items exception applies to transactions (1) that occur year after year, (2) where allowing the accrual will allow a better matching of revenues and expenses, and (3) where the item is paid within 8 ½ months after the end of the year. Since you have had the rebate program in effect for several years, the first test will be met if you plan to continue the rebates. Perhaps we should discuss whether the program will be continued. Assuming the recurring item test can be satisfied, the deduction for the 1,000 claims filed in 2003 but paid in January 2004 can be deducted in 2003. Thus, the total 2003 expense would be \$2,200,000.

Please contact me if you have any further questions.

Larry Brown, CPA  
Partner

pp. 15-13 and 15-14

24. The company will have a \$190,000 (\$100,000 + \$90,000) negative § 481 adjustment from the change in accounting methods. Under the current Revenue Procedures that apply to this issue, Moss can use the entire adjustment to reduce taxable income for the year of the change. pp. 15-17 and 15-18
25. This problem can be solved using future values—comparing Floyd's change in after-tax cash flow at the end of one year under two options. The installment sale is preferable (future value of \$81,766, as compared to \$79,281 under the cash transaction) because it will allow Floyd to shift income to a lower tax bracket, as well as defer the tax on one-half of the gain.

Option 1—Sell for cash		
Cash received	\$100,000	
Less: basis	<u>(25,000)</u>	
Recognized gain	<u>\$ 75,000</u>	
Tax @ .35	<u>\$ 26,250</u>	
After-tax proceeds (\$100,000 – \$26,250)	<u>\$ 73,750</u>	
Compounded 1 year: $\{1 + [(1 - .25) \times .10]\}$	<u>\$ 79,281</u>	<u>\$79,281</u>
Option 2—Installment sale		
Cash received: year 1	\$50,000	
Gross profit % = $(\$100,000 - \$25,000)/\$100,000 =$	<u>X 0.75</u> *	
Recognized gain	<u>\$37,500</u>	
Tax @ .35	<u>\$13,125</u>	
After-tax proceeds (\$50,000 – \$13,125)	<u>\$36,875</u>	
Compounded 1 year: $\{1 + [(1 - .25) \times .10]\}$	<u>\$39,641</u>	\$39,641
Cash received: year 2	<u>\$52,000</u>	52,000
Interest: imputed at 4% X \$50,000	<u>\$ 2,000</u>	
Tax on interest @ .25	<u>\$ 500</u>	(500)
Sales proceeds	\$50,000	
Gross profit % = $(\$100,000 - \$25,000)/\$100,000 =$	<u>X 0.75</u>	
Taxable gain	<u>\$37,500</u>	
Tax @ .25	<u>\$ 9,375</u>	(9,375)
Total future value		<u>\$81,766</u>

\*The selling price is calculated net of the \$2,000 imputed interest.

pp. 15-18 and 15-19

26. a. (1) Total gain = [\$100,000 (selling price) – \$70,000 (basis) – \$7,500 (selling expenses)] \$22,500
- (2) Contract price = \$100,000 (selling price) – \$55,000 (mortgage assumed) \$45,000
- (3) Collections in the year of sale  
Cash paid at closing \$ 9,000  
Add:

Earnest money paid in 2002	1,000
Seller's expense paid	7,500
Less: Amount received for property taxes	<u>(2,500)</u>
Subtotal	\$15,000
Collections on principal	<u>4,000</u>
Total collections, 2003	<u>\$19,000</u>

Note that \$2,500 of the amount received from Polly is for Polly's share of the property taxes.

$$(4) \frac{\text{Gain} - \$ 1250 \text{ gain}}{\text{Contract price}} \times \text{Collections} = \text{Gain recognized}$$

$$\frac{\$22,500 - \$9,000}{\$45,000} \times \$19,000 \quad \$ 5,700^*$$

Add ordinary income from depreciation recapture	<u>9,000</u>
Total gain, 2002	<u>\$14,700</u>

\*All § 1231 gain.

pp. 15-19 to 15-21, Example 24, and Chapter 9

b. (2) Contract price [see computation in a. (2)]	\$45,000
Plus mortgage assumed, less seller's expense and basis (\$55,000 - \$7,500 - \$45,000) =	<u>2,500</u>
Contract price (modified)	<u>\$47,500</u>

Since the sum of Kay's basis and selling expenses is less than the liabilities assumed by the buyer, the difference must be added to the contract price and to the payments received in the year of sale.

(3) Total collections, 2003 [see computation in a. (3)]	\$19,000
Excess calculated in b. (2)	<u>2,500</u>
Total collections, 2003 (modified)	<u>\$21,500</u>

pp. 15-18 to 15-21

27. a. Selling price (\$250,000 + \$705,260)	\$955,260
Less selling expenses	(10,000)
Less seller's basis	<u>(400,000)</u>
Total gain	\$545,260
§ 1245 gain recognized	<u>(40,000)</u>
Installment sales gain	<u>\$505,260</u>

$$\frac{\text{Total gain} - \$ 1245 \text{ gain}}{\text{Contract price}} \times \text{Collections} = \text{Gain recognized}$$

$$\frac{\$545,260 - \$40,000}{\$955,260} \times \$250,000 \quad \$132,231$$

Gain recognized in 2003 (\$40,000 + \$132,231) \$172,231

pp. 15-18 to 15-21 and Example 24

b.	<u>Beginning Balance</u>	<u>Interest Income @ 5.0%</u>	<u>Received</u>	<u>Ending Balance</u>
2003	\$705,260	\$17,632 <sup>(1)</sup>	\$ -0-	\$722,892
2004	722,892	27,108 <sup>(2)</sup>	750,000	-0-

Thus, Kelly's interest income for 2004 is \$27,108.

Notes

(1)  $\$705,260 \times 5.0\% \times 6/12 = \$17,632$

(2)  $\$722,892 \times 5.0\% \times 9/12 = \$27,108$

pp. 15-21 to 15-23

28. Father would recognize all of his deferred gain in 2004. Thus, recognized gain would be:

$$\frac{\text{Gain}}{\text{Contract price}} \times \text{Collections} = \frac{\$200,000}{\$250,000} \times \$240,000 = \$192,000$$

pp. 15-19 and 15-22

29. a. The gift to George's daughter is a taxable disposition of the installment obligation. George must recognize a \$30,000 gain (i.e., all of the remaining deferred profit), at the time of the gift:

$$\frac{\$100,000 - \$40,000}{\$100,000} \times \$50,000 = \$30,000 \text{ gain}$$

In addition, George must recognize \$15,000 (60% X \$25,000) in 2003 for the payment he received on January 1, 2003.

- b. The transfer to the controlled corporation is not a taxable disposition of the installment obligation. The corporation, though, will recognize the income as the installment payments are collected. George will recognize \$15,000 gain for the payment he received on January 1, 2003.
- c. George must report \$30,000 gain in 2003:

$$\frac{\$100,000 - \$40,000}{\$100,000} \times \$25,000 = \$15,000$$

from the payment that was received on December 31, 2003 as well as \$15,000 gain from the payment that was received on January 1, 2003. The transfer of the installment obligations to George's estate is not a taxable event. The estate, or its beneficiaries, though, will recognize the deferred realized gain when the installment obligation is collected.

pp. 15-19, 15-24, and 15-25

30. a. Since a \$140,000 item is in dispute, the profit to be reported in 2003 would be  $\$1,200,000 - \$750,000 - \$140,000 = \$310,000$ . In 2004, a deduction of \$30,000 ( $\$170,000 - \$140,000$ ) will be available.
- b. At the end of 2003, it cannot be determined whether the contract will yield a profit or loss. (If the dispute is settled in favor of the contractor, a profit will result, but if it is settled in favor of the customer, the contractor would recognize a loss.) Therefore, the \$70,000 loss is deferred until 2004 when the dispute is resolved.

pp. 15-26 to 15-28 and Examples 31 and 32

31. a. 1. Rust must capitalize the payroll taxes.
2. Rust may expense the current service costs.
3. Rust is required to capitalize only the straight-line depreciation.
4. Rust must capitalize the sales tax.
5. Rust may expense past service costs.
6. Rust may expense costs of successful bids.

p. 15-27

- b. Willis, Hoffman, Maloney, and Raabe, CPAs  
5191 Natorp Boulevard  
Mason, OH 45040

September 18, 2003

Rust Company  
P. O. Box 1000  
Harrisonburg, VA 22807

To the Board of Directors of Rust Corporation:

You asked me to summarize the tax accounting implications on entering into the proposed line of high volume and low gross profit rate contracts. The new contracts would generally cause an acceleration of your tax liabilities.

With the increased volume, gross receipts would exceed \$10,000,000 a year (i.e., estimated at \$12,000,000), and the company will be required to use the percentage of completion method. Under your present method of accounting, the completed contract method, the profit on a contract is not recognized until the contract is completed, which is generally the year following the year when the contract is started, or the second year after the contract is started. Under the percentage of completion method, a portion of the profit on a contract is included in the income each year based on the cost incurred during the year as a percent of the total estimated cost of the contract.

As a result of exceeding \$10,000,000 in gross receipts, all contracts are subject to the percentage of completion method, and not just the new type of contract you are considering. Therefore, in deciding whether to enter these contracts, or the contract terms, you should take into account the added interest expense (or loss of income from funds) caused by earlier payments of income taxes.

Please contact me if you would like to ask any question, or would like me to make the calculations of the actual effects of changing to the percentage of completion method.

Sincerely,

Stuart Day, CPA  
Partner

pp. 15-26, 15-28, and Exhibit 15-1

32. a. The agreement can be construed as six contracts with each requiring less than 12 months to complete. Under this interpretation, the contract is not long-term.
- b. The hotdog vendor may be deemed a producer who normally carries hotdogs in inventory. This would mean that the contract is a manufacturing contract that is not long-term.
- c. The small contractor (average annual gross receipts of less than \$10 million) can use the completed contract method provided the office building will be completed in less than two years.

pp. 15-26 to 15-29

33. a. If the contract is to produce "unique" property, the taxpayer must use the percentage of completion method (i.e., a long-term contract) to report the profit on the contract. Note that if Ostrich qualifies for the "small contractor exception," it could use the completed contract method. If the property is not unique, the accrual method can be used to report the income.
- b. The interest capitalization rules apply to the contract. Thus, interest attributable to the production costs in the contract must be added to the contract costs.
- c. If the bidding costs result in a successful contract, these costs must be capitalized as a part of the contract costs and then deducted as the income is reported from the contract (by the percentage of completion method or accrual method).
- d. If the company uses higher estimates of the total costs of the contract, the company will show a larger profit in the year of completion. Under the look-back method, the company will also be required to pay interest on the underpayment of taxes in prior years caused by the higher than actual cost estimates.

pp. 15-26, 15-28, and Exhibit 15-1

34. a. 2003 Gross profit =

$$\left( \frac{\text{Total cost to date}}{\text{Total estimated cost}} \times \text{Contract price} \right) - \text{Total cost to date}$$

$$= [(\$1,400,000/\$2,100,000) \times \$2,400,000] - \$1,400,000 = \$1,600,000 - \$1,400,000 = \$200,000$$

2004 Gross profit =

$$\text{Contract price} - \text{Total contract cost} - \text{2003 gross profit} = \$2,400,000 - \$1,900,000 - \$200,000 = \$300,000$$

- b. To determine the lookback interest, it is first necessary to determine the gross profit for 2003, given the actual cost of the contract.

Corrected 2003 Gross profit =

$$[\$1,400,000/\$1,900,000 \times \$2,400,000] - \$1,400,000 = \$368,421$$

$$\text{Taxes paid on the 2003 gross profit} = .34 \times \$200,000 = \$68,000$$

$$\text{Taxes that should have been paid on actual gross profit} = .34 \times \$368,421 = \$125,263$$

$$\text{Interest for one year @ 7\%} = .07(\$125,263 - \$68,000) = \$4,008$$

- c. Willis, Hoffman, Maloney, and Raabe, CPAs  
5191 Natorp Boulevard  
Mason, OH 45040

August 16, 2003

Board of Directors  
Swallow Company  
400 Front Avenue  
Ashland, OR 97520

Dear Board of Directors:

You asked my advice regarding the estimates that should be used for percentage of completion calculations applied to long-term contracts. In answering this question, I shall first consider the consequences of errors in the estimates where:

- (1) estimated costs are less than the actual cost.
- (2) estimated costs are greater than the actual cost.

Under the percentage of completion method of accounting, the income is allocated to each period based on the cost incurred in that year as a percentage of the estimated total cost. When the contract is completed, the contract profit is reallocated to each year using the actual cost of the contract (each year the profit is allocated based on its actual cost as a percent of total actual cost). Interest is computed at the Federal rate on the difference between the profits originally reported on the return and the recomputed profits.

In the case of the low estimate, you overpay your taxes and receive taxable interest. The interest is based on the Federal rate for borrowing, which is less than the rate your company pays to borrow money, and less than the rate the shareholders should expect to earn on their investments. Thus, the low cost estimates should be avoided.

In the case of the high estimates of costs, you defer taxes. However, you are charged interest on the underpayment of taxes. Although the interest rate is lower than the rate at which you or the shareholders pay to borrow funds, the lookback interest is not deductible. Thus, with a Federal rate of 8%, the nondeductible interest is equivalent to  $(8\%)/(1 - .35) = 12.3\%$  deductible interest, a rate that is higher than the shareholders and the company presently pay for funds.

In conclusion, the percentage of completion calculations should be based on your best estimate of the cost of completing the contracts.

Please call me if you have any further questions.

Sincerely,

Melissa King, CPA  
Partner