

| 5. | <u>Corporation A</u> | <u>Corporation B</u> | <u>Corporation C</u> | <u>Corporation D</u> |
|----------------------------------|----------------------|----------------------|----------------------|----------------------|
| YTD realized income (loss) | \$ 95,000 | \$ 5,000 | \$ (80,000) | \$ 20,000 |
| Projected income (loss)..... | <u>30,000</u> | <u>(70,000)</u> | <u>(50,000)</u> | <u>(35,000)</u> |
| Total income (loss)..... | \$125,000 | \$ (65,000) | \$(130,000) | \$ (15,000) |
| Income adjustments..... | | <u>(7,000)</u> | <u>2,000</u> | |
| Total taxable income (loss). ... | \$125,000 | \$ (72,000) | \$(128,000) | \$ (15,000) |
| Statutory tax rate..... | <u>40%</u> | <u>40%</u> | <u>40%</u> | <u>40%</u> |
| Tax expense (benefit) | \$ 50,000 | \$(28,800) | \$ (51,200) | \$ (6,000) |
| Tax credit. | <u>(2,000)</u> | <u>(3,500)</u> | | <u>(1,000)</u> |
| Net tax expense (benefit) | \$ 48,000 | \$(32,300) | \$ (51,200) | \$ (7,000) |
| Limit to tax benefits | | \$(14,400) | \$ (38,860) | \$ (5,000) |
| Effective annual tax rate..... | 38.4% ¹ | 22.2% ² | 29.9% ³ | 33.3% ⁴ |

¹\$48,000 ÷ \$125,000 = 38.4%

²\$14,400 ÷ \$65,000 = 22.2%

The tax benefit is traceable to carrying back \$32,000 at 30% to 20X1 and \$15,000 at 32% to 20X2.

³\$38,860 ÷ \$130,000 = 29.9%

The prior 2 years' income totals \$140,000, of which \$128,000 may be offset by the NOL carryback, resulting in a tax benefit of \$38,860 [(105,000 × 30%) + (23,000 × 32%)].

⁴\$5,000 ÷ \$15,000 = 33.3%

Tax benefit limited to projected carryforward (\$12,500 × 40%).

6.

Original First Quarter Estimated
Effective Annual Tax Rate

| | |
|--|---------------------------------------|
| Year-to-date income (loss)..... | \$ (80,000) |
| Projected income (loss)..... | <u>(50,000)</u> |
| Total income (loss)..... | \$(130,000) |
| Tax exempt income..... | <u>(6,000)</u> |
| Taxable income (loss)..... | <u><u>\$(136,000)</u></u> |
| Tax expense (benefit)..... | <u><u>\$ (30,350)¹</u></u> |
| Estimated rate of benefit ($\$30,350 \div \$130,000$)..... | <u><u>23.35%</u></u> |

¹Benefit of NOL carryback:

| | |
|---|------------------------|
| (\$35,000 × 25%) + (\$30,000 × 22%)..... | \$15,350 |
| Benefit remaining NOL carryforward: | |
| \$71,000 of remaining NOL offsets \$50,000 of future income | |
| (\$50,000 × 30%)..... | 15,000 |
| Benefit of estimated tax credits of \$10,000 (no remaining tax available)..... | <u>0</u> |
| Total benefit..... | <u><u>\$30,350</u></u> |

Restatement of Original First Quarter Tax Benefit

| | |
|---|-------------------------------------|
| Original first quarter tax benefit [$(\$80,000) \times 23.35%$]..... | \$(18,680) |
| Restated first quarter estimated effective annual tax rate: | |
| Year-to-date income (loss)..... | \$ 30,000 |
| Projected income (loss)..... | <u>90,000</u> |
| Total restated income (loss)..... | \$120,000 |
| Tax exempt income (loss)..... | <u>(5,000)</u> |
| Taxable income (loss)..... | <u><u>\$115,000</u></u> |
| Tax expense (benefit)..... | <u><u>\$ 27,500²</u></u> |
| Estimated rate of expense ($\$27,500 \div \$120,000$)..... | <u><u>22.92%</u></u> |
| ² $(\$115,000 \times 30\%)$ less \$7,000 tax credit..... | \$ 27,500 |
| Restated first quarter tax expense ($\$30,000 \times 22.92%$)..... | \$ 6,876 |
| Reallocation of original first quarter tax expense: | |
| Original first quarter tax expense (benefit)..... | <u><u>\$(18,680)</u></u> |
| Restated tax expense (benefit) on ordinary income..... | \$ 6,876 |
| Tax expense (benefit) traceable to discontinued operation (A plug to balance)..... | <u><u>(25,556)</u></u> |
| Total restated tax expense (benefit)..... | <u><u>\$ (18,680)</u></u> |

9. The key to defining the segments of Norfo International is to analyze how information might be structured for purposes of decision making by the chief operating decision maker. Possible alternatives would be to organize the information around products or services, geographic areas, or product/service groups within geographic areas. For example, a product/service approach might suggest major segments of foodstuffs (including food processing, citrus groves, and packaging), resort and travel, and paper products. The paper products and food packaging areas could be combined to form a separate segment. Organizing the information around geographic areas might suggest the following: southeastern United States, Eastern seaboard, Great Lakes region, and the Bahamas.

Obviously, various combinations are possible and students should be encouraged to think about which combinations seem most relevant for addressing the issues of how to evaluate performance and allocate resources among the various activities of an enterprise. Attention should also be focused on organizing information in such a way that the aggregation guidelines of the FASB are not violated. For example, does it really make sense to analyze information structured around the Eastern seaboard region when that segment would include hotels, travel agencies, and the manufacture of paper products? Would it make more sense to separate the Eastern seaboard into two segments: hotels/travel agencies and paper products? For example, if unemployment in the Eastern seaboard is high, the travel and leisure area would probably be affected differently than the paper manufacturing division.

10. Determination of whether segments are reportable:

| Segment | Revenues | | | Reported | Assets |
|-------------------------------------|----------------------|--------------------|----------------------|----------------------|---------------------|
| | External | Intersegment | Total | Profit (loss) | |
| Film studios | \$ 82,000,000 | | \$ 82,000,000 | \$(11,000,000) | \$38,000,000 |
| Software development | 12,000,000 | \$3,400,000 | 15,400,000 | (2,600,000) | 5,400,000 |
| Leisure clothing | 45,000,000 | 0 | 45,000,000 | 23,000,000 | 13,000,000 |
| Office design group | 22,000,000 | 2,700,000 | 24,700,000 | 6,700,000 | 5,000,000 |
| Total | <u>\$161,000,000</u> | <u>\$6,100,000</u> | <u>\$167,100,000</u> | <u>\$ 16,100,000</u> | <u>\$61,400,000</u> |
| Total of all reported profits | | | \$ 29,700,000 | | |
| Total of all reported losses | | | \$(13,600,000) | | |

| Segment | Is Segment's | | | Is Segment Reportable? |
|----------------------------|---------------------------------------|---|-------------------------------------|------------------------|
| | Revenue 10% or More of \$167,100,000? | Absolute Value of Profit or Loss 10% or More of \$29,700,000? | Assets 10% or More of \$61,400,000? | |
| Film studios..... | Yes | Yes | Yes | Yes |
| Software development | No | No | No | No |
| Leisure clothing..... | Yes | Yes | Yes | Yes |
| Office design group..... | Yes | Yes | No | Yes |

Significance of reportable segments:

| | |
|---|----------------------|
| Consolidated revenue | \$177,000,000 |
| Percentage requirement..... | <u>75%</u> |
| Dollar requirement..... | <u>\$132,750,000</u> |
| External revenue of all reportable segments | \$149,000,000 |

Conclusion: The reportable segments represent a significant portion of the enterprise.