III. RATIO ANALYSIS

Instruction: Calculate the following ratios given the data on pages A110 and A120.

LIQUIDITY RATIOS for 2002
($ 000)

Current Ratio $\dfrac{\text{Current Assets}}{\text{Current Liabilities}} = \dfrac{186}{56} = 3.3$

Quick Ratio $\dfrac{\text{Current Assets - Inventory}}{\text{Current Liabilities}} = \dfrac{186 - 70}{56} = 2.1$

ACTIVITY RATIOS

Accounts Receivable Turnover $\dfrac{\text{Net Receivable Sales}}{\text{Average Net Accounts Receivable}} = \dfrac{450}{\frac{60 + 90}{2}}$ = 6 times

Average Collection Period $\dfrac{\text{Average Net Accounts Receivable}}{\frac{\text{Net Receivable Sales}}{365}} = \dfrac{\frac{60 + 90}{2}}{\frac{450}{365}} = \dfrac{75}{1.23}$ = 61 days

Inventory Turnover $\dfrac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \dfrac{270}{\frac{70 + 40}{2}} = \dfrac{270}{55}$ = 4.9 times

Fixed Asset Turnover $\dfrac{\text{Net Sales}}{\text{Average Fixed Assets}} = \dfrac{450}{\frac{180 + 210}{2}} = \dfrac{450}{195}$ = 2.3 times

PROFITABILITY RATIOS

Return on Sales $\dfrac{\text{Operating Income}}{\text{Net Sales}} = \dfrac{80}{450} = .178$ = 17.8%

Return on Assets $\dfrac{\text{Operating Income}}{\text{Average Total Assets}} = \dfrac{80}{\frac{426 + 466}{2}} = \dfrac{80}{446} = .179$ = 17.9%

Return on Equity/ Common Stock $\dfrac{\text{Operating Income} - \text{Preferred Dividends}}{\text{Average Common Stock Equity}} = \dfrac{80 - 8.8}{\frac{100 + 100}{2}} = \dfrac{71.2}{100} = .712$ = 71.2%

NOTE: Taxable Income used in place of Operating Income.

LEVERAGE RATIOS

Debt/Equity Ratio $\dfrac{\text{Total Liabilities}}{\text{Stockholders' Equity}} = \dfrac{136}{290} = .47$ = 47%

Debt/Asset Ratio $\dfrac{\text{Total Liabilities}}{\text{Assets}} = \dfrac{136}{426} = .32$ = 32%

Times Interest Earned $\dfrac{\text{Operating Income} + \text{Net Interest} + \text{Income Tax Expense}}{\text{Net Interest}} = \dfrac{55 + 6 + 15}{6}$ = 12.7 times