APPENDIX A

Glossary

Accounts payable: The value of purchased services and materials that are being used but have not been paid.

Accounts receivable: Credit extended to customers usually on a 30-day basis. Cash is set aside to account for the fact that some customers may not pay their bills.

Administrative expense: Includes administrative and offices salaries, rent, auditing, legal, engineering, etc. expenses.

Amortization: Often used interchangeably with depreciation but there is a slight technical difference depending on whether or not the life of an asset is known. If the period of time is definitively known, the annual expense is called *amortization*. If the life is estimated, it is called *depreciation*.

Annual net sales: Pounds of product sold times the net selling price.

Annual report: The report of management to stockholders and other interested parties at the end of a year of operation showing the status of the company, its funds, profits, income, expenses, and other information.

Assets: The list of money on hand, marketable securities, monies due, investments, plants, properties, patents, inventory, etc. at cost or market value whichever is smaller. These are the items a company or a person owns.

Balance sheet: This is a tabulation of the assets, liabilities, and stockholders' equity for a company. The assets must equal the liabilities plus the stockholders' equity.

Bonds: When one purchases a bond, this person acquires an interest in debt and becomes a creditor of a company. The purchaser receives the right to receive regular interest payments and the subsequent repayment of the principal.

Book value of common stock: This is the net worth of a firm divided by the number of shares of common stock issued at the time of a report.

Book value: The original investment minus the accumulated depreciation.

Break-even chart: This is an economic production chart depicting the point at which the total revenue equals the total cost of production.

By-product: A production item made as a consequence of the production of a main product. The by-product may have value in itself or as a raw material for another use.

Capital ratio: The ratio of capital investment to sales dollars; it is the reciprocal of capital turnover.

Capital turnover: The ratio of sales dollars to capital investment; it is the reciprocal of the capital ratio.

Cash: Money that must be on hand to pay for monthly operating expenses, e.g., wages, salaries, raw materials, etc.

Cash flow: Net income after taxes plus depreciation (and depletion) is the cash flow into a company's treasury.

Common stock: Money paid into a corporation for the purchase of shares of common stock that becomes the permanent capital of the firm. Common stockholders have the right to transfer ownership and may sell the stock to individuals or firms. Common stockholders have the right to vote at annual meetings or by proxy.

Compound interest: The interest charges under the condition that interest is charged on previous interest plus the principal in any time period.

Continuous compounding: A mathematical procedure based upon a continuous interest function rather than a discrete interest period.

Conversion cost: The cost of converting raw materials into a finished product.

Corporation: In 1819, Chief Justice Marshall of the Supreme Court defined a corporation as "and artificial being, invisible, intangible and existing only in contemplation of law." It exists by the grace of the state and the laws of a state govern the procedure for its formation.

Cost of capital: This is what it costs a company to borrow money from all sources, namely, loans, bonds, preferred and common stocks. It is expressed as an interest rate.

Cost of sales: The sum of the fixed and variable (direct and indirect) expenses for producing a product and delivering it to the customer.

Decision or decision making: A program of action undertaken as the result of (a) an established policy or (b) an analysis of variables.

Design to cost: A management technique to achieve system designs that meet stated cost parameters. Cost as a design parameter is considered on a continuous basis as part of a system's development and production processes.

Depreciation: A reasonable allowance by the Internal Revenue Service for exhaustion, wear and tear, and normal obsolescence of equipment used the trade or business. Such property must have a useful life of more than 1 year. It is a noncash expense deductible from the income for tax purposes.

Direct expense: The expense directly associated with the production of a product like utilities, labor, maintenance, etc.

Direct labor expense: The expense of labor involved in the actual production of a product or a service.

Direct material expense: The expense of materials consumed in or incorporated into a product or service.

Distribution expense: This expense includes advertising, samples, travel, entertainment, freight, warehousing, etc. to distribute a product.

Dollar volume: Dollar worth of a product manufactured per unit of time.

Earnings: The difference between income and operating expenses.

Economic value added (EVA): It is the period dollar profit above the cost of capital. It is a means to measure an organization's value and as a way to determine how management's decisions contribute to the value of a company.

Effective interest: The true value of interest computed by equations for the compound interest rate for a 1-year period.

Equity: The owner's actual capital held by a company for its operations.

External funds: Capital obtained by selling stock, bonds or by borrowing.

FIFO (first in, first out): This term refers to the valuation of raw material and supplies inventory, meaning the first into a company or process is the first used or out.

Financial expense: The charges for use of borrowed funds.

Fixed assets: These are the real or material facilities that represent part of the capital in an economic venture.

Fixed capital: This item includes the buildings and equipment.

Fixed expense: An expense that is independent of the rate of output, for example, depreciation, plant indirect expenses, etc.

Full cost accounting: It describes how goods and services can be priced to reflect their true costs, including production, use, recycling, and disposal.

Future growth value (FGV): It is a measure that represents where company performance is relative to the business cycle—above or below the average long-term performance.

Future worth: The future worth is an expected value of capital in the future according to some predetermined method of computation.

Goods-in-process inventory: The hold-up of product in a partially finished state.

Goods manufactured, cost of: This is the total expense, direct and indirect expenses, including overhead charges.

Goods sold, cost of: The total of all expenses before income taxes that is deducted from revenue.

Gross domestic product: An indicator of a country's economic activity. It is the sum of the goods and services produced by a nation within its borders.

Gross national product: Another indicator of a country's economic activity. It is the sum of all the goods and services produced by a nation including domestic and foreign activities attributable to that nation.

Gross margin (profit): The total revenue minus the cost of goods sold.

Income tax: This is the tax imposed on corporation profits by the federal and/or the state governments.

Indirect expenses: These expenses are part of the manufacturing expense of a product but are not directly related to the amount of that product manufactured. Examples are depreciation, local taxes, insurance, etc.

Internal funds: This is the capital available from depreciation and accumulated retained earnings.

Inventory: This is the quantity of raw materials and/or supplies held in a process or in storage.

Last in, first out (LIFO): This term refers to the valuation of raw material and supplies inventory, meaning the last material into a process or storage is the first used or out.

Leverage: The influence of debt on the earning rate of a company.

Liabilities: This is the amount of capital owed by a company.

Life-cycle cost: It is the cost of development, acquisition, support, and disposal of a system over its full life.

Manufacturing expense: This is the sum of the raw materials, utilities, labor, maintenance, depreciation, local taxes, etc. It is the sum of the direct and indirect (variable and fixed) manufacturing expenses.

Marginal costs: This is the rate of change of costs with production or output.

Market capitalization: It is the product of the number of common stock shares outstanding times the share price.

Market value added: The market has a certain future economic value added for a company. It is the present value of the future economic value added (EVA) generated by a company. It is a good measure of how much value a firm has created.

Minimum acceptable rate of return (MARR): This is the minimum interest rate that management selects as acceptable for a financial investment.

Net sales price: Gross sales price minus freight adjustments.

Net worth: This is the sum of the stockholders' investment plus surplus, or total assets minus total liabilities.

Nominal interest: The number applied loosely to describe the annual interest rate.

Operating expense: This is the sum of the expenses for the manufacturing of a product plus general, administrative, and selling expenses.

Operating margin: The gross margin minus the general, administrative, and selling expenses.

Opportunity cost: This is the return that would have been realized had the funds been invested in an alternative opportunity. Therefore, any time an amount of capital is invested in an investment, an opportunity to invest that amount elsewhere at the MARR has been foregone. The MARR can be defined at the cost of the opportunity foregone.

Payout time (payback period): Fixed capital investment divided by the after-tax cash flow.

Preferred stock: This stock has claims that it commands over the common stock and the preference is related to dividends. The holders of such stock receive dividends before any distribution is made to the common stockholders. Preferred stockholders usually do not have voting rights.

Present worth: The value at some datum time (present time) of expenditures, costs, profits, etc. according to a predetermined method of computation.

Production rate: The amount of product manufactured in a given time period.

Profitability: A term applied in a broad sense to the economic feasibility of a proposed venture or an ongoing operation.

Revenues: The net sales received for selling a product to a customer.

Sales, administration, research, and engineering expenses (SARE): Overhead item for expenses incurred as a result of maintaining sales offices, administration offices, and the expenses of maintaining research and engineering departments. Usually expressed as a percentage of annual net sales.

Sales volume: The amount of sales expressed in pounds, gallons, tons, cubic feet, etc. per unit of time.

Selling expenses: Salaries and commissions paid to sales personnel.

Simple interest: The interest charges under the condition that interest in any time period is only charged on the principal.

Sinking fund: An accounting procedure computed according to a specified procedure to provide capital to replace an asset.

Surplus: The excess of earnings over expenses that is not distributed to stockholders.

Tax credit: The amount available to a firm as part of its annual return because of deductible expenses for tax purposes. Examples have been research and development expenses, energy tax credits, etc.

Time value of money: The expected interest rate that capital should or would earn. Money has a value with respect to time.

Total operating investment: This includes the fixed capital, backup capital, utilities and services capital, and working capital.

Utilities and services capital: Includes electrical substations, plant sewers, water facilities, etc.

Value added: The value added to a product is the difference between the raw material expenses and the selling price of that product.

Variable expense: Any expense that varies directly with output.

Working capital: In the accounting sense, it is the current assets minus the current liabilities. It consists of the total amount of money invested in raw materials, supplies, goods-in-process and product inventories, accounts receivable, and cash minus the those liabilities due within 1 year.