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**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**

**Form 10-K**

**FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO  
SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

- ☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended June 30, 2001**

or

- ☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission file number: 0-24786**

**Aspen Technology, Inc.**

*(Exact Name of Registrant as Specified in Its Charter)*

**Delaware**

*(State or Other Jurisdiction  
of Incorporation or Organization)*

**04-2739697**

*(I.R.S. Employer Identification Number)*

**Ten Canal Park**

**Cambridge, Massachusetts**

*(Address of Principal Executive Offices)*

**02141**

*(Zip Code)*

**Registrant's telephone number, including area code: (617) 949-1000**

**Securities registered pursuant to Section 12(b) of the Act: None**

**Securities registered pursuant to Section 12(g) of the Act: Common stock, \$0.10 par value per share**

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

As of September 26, 2001, the aggregate market value of common stock (the only outstanding class of equity of the Registrant) held by nonaffiliates of the Registrant was \$235,245,820, based on a total of 26,461,847 shares of common stock held by nonaffiliates and on a closing price of \$8.89 for the common stock as reported on the Nasdaq National Market.

As of September 26, 2001, 31,765,498 shares of common stock were outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

The Registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended June 30, 2001. Portions of such proxy statement are incorporated by reference in Part III of this Form 10-K.

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This Form 10-K contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which are intended to be covered by the safe harbors created thereby. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects” and similar expressions are intended to identify forward-looking statements. Readers are cautioned that all forward-looking statements involve risks and uncertainties, many of which are beyond our control, including the factors set forth under “Item 1. Business—Factors that may affect our operating results and stock price.” Although we believe that the assumptions underlying the forward-looking statements contained herein are reasonable, any of the assumptions could be inaccurate and there can be no assurance that actual results will be the same as those indicated by the forward-looking statements included in this Form 10-K. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by us or any other person that our objectives and plans will be achieved. Moreover, we assume no obligation to update these forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements.

## **PART I**

### **Item 1. *Business***

We are a leading supplier of integrated software and services to the process industries. The Aspen ProfitAdvantage solution consists of a comprehensive set of software and consulting services that supports our customers' collaborative engineering, manufacturing, supply chain and e-business strategies, and enables our customers to identify and take advantage of profit opportunities.

Our solutions improve a variety of business activities, including streamlining raw material procurement, optimizing production, reducing the cost of delivering finished products to customers and increasing returns from plant assets. These solutions enable customers to improve their competitiveness and profitability by increasing revenues, reducing operating costs, reducing working capital requirements and decreasing capital expenditures.

Key elements of the Aspen ProfitAdvantage solution include the breadth of the solution, the integration between our products and our ability to enable real-time information for executive decision-making, all based on our extensive domain knowledge in process modeling and chemical engineering. The specific challenges of the process industries demand dedicated solutions that are tailored to the needs of each vertical market. With over 20 years of process industry experience, we have developed domain expertise and extended the breadth of our solution to provide a strategic advantage to our customers and a significant barrier to entry by competitors.

Our customer base of over 1,200 process manufacturers includes 46 of the world's 50 largest chemical companies, 23 of the world's 25 largest petroleum refiners, 18 of the world's 20 largest pharmaceutical companies and 17 of the world's 20 largest engineering and construction firms that serve the process industries. We have established a network of strategic relationships to leverage our internal sales and marketing efforts, enhance the breadth of our solutions and expand our implementation capabilities. This network includes relationships with systems integrators such as Accenture, IBM and PricewaterhouseCoopers and technology developers such as Intergraph and Optimum Logistics.

### **Industry Background**

To succeed in an increasingly competitive global environment, process manufacturers must simultaneously reduce costs and increase efficiency, responsiveness and customer satisfaction. Process manufacturers produce petroleum products, petrochemicals, polymers, specialty chemicals, pharmaceuticals, pulp and paper, electric power, food and beverages, consumer products, metals and minerals, and semiconductors using certain common production methods. These methods involve chemical reactions, combustion, mixing, separation, heating, cooling and similar processes to make products in the form of bulk solids, liquids, gases, powders and films. Because process manufacturing tends to be asset-intensive, increases in profitability in these industries depend substantially upon reducing the costs of raw materials, energy and capital. Given the large production volumes typical in the process industries and the relatively low profit margins characteristic of many sectors within the process industries, even relatively small reductions in raw material or energy requirements or small improvements in input costs, throughput or product yields can significantly increase the profitability of the process manufacturing enterprise.

The process industries pose significant challenges because of the complex activities and relationships, or value chains, required to purchase raw materials, manufacture products, and deliver final products to customers. Factors that make it difficult for these companies to manage their value chains and to make optimal economic decisions include:

- products are manufactured in continuous processes that are unpredictable and difficult to model;
- production sequence and raw material specification both have a major impact on feasibility and profitability;
- multiple, interdependent products are made simultaneously, making production planning complicated;

- manufacturing plants are sophisticated and extremely capital intensive; and
- transportation logistics are complex.

Over the last 20 years, companies in the process industries have invested in a number of technologies to improve their performance across the enterprise. Process manufacturers initially automated their production processes by deploying distributed control systems, or DCS, which used computer hardware systems, communication networks and industrial instruments to measure, record and automatically control process variables. More recently, process manufacturers have automated key business processes by implementing enterprise resource planning, or ERP, software solutions which enhance the flow of business information across the enterprise. Although DCS and ERP solutions can be important components of a solution to improve manufacturing enterprise performance, they do not incorporate either the detailed chemical engineering knowledge essential to optimize the design and operation of manufacturing processes or the plant performance data required to support more intelligent real-time decision making.

To optimize performance, process manufacturers require tools that enable them to fundamentally improve their highly complex production methods and processes. To meet these objectives, intelligent decision-support solutions must provide an accurate understanding of a plant's capabilities, as well as accurate planning and collaborative forecasting information. Because of the complexity of the processes being modeled, solution providers must possess extensive chemical engineering expertise, an in-depth understanding of the process industry manufacturing value chain and the technological know-how to develop and deploy these offerings.

As process manufacturers have become more adept at using point solutions that optimize individual engineering and manufacturing business processes, they increasingly are seeking additional performance improvements by integrating these solutions, both with one another and with DCS, ERP and other enterprise systems, to provide real-time, intelligent decision support. To achieve these objectives, companies are implementing production optimization solutions to integrate related business processes across a single production facility. Companies are also implementing integrated production optimization solutions to extend the solutions across multiple plants within an enterprise by adding planning and scheduling functionality and extending integration beyond the enterprise walls.

Extended supply chain optimization enables process manufacturers to reduce cycle times substantially, adjust production quickly to meet changing customer requirements, synchronize key business processes with plants and customers across numerous geographies and time zones, and quote delivery dates more accurately and reliably. Traditional supply chain solutions and emerging business-to-business integration vendors lack the deep process knowledge essential to solve the complex problems faced by process manufacturers attempting to achieve true optimization of their enterprises, from design to production to management of the extended supply chain.

Because of the size of the process industries and the rapid and significant return on investment that we believe customers can achieve, the market for asset optimization, value chain planning and value chain execution solutions in the process industries is significant. Due to the recent availability of these solutions and the traditional hesitancy of process manufacturers to adopt information technology or IT, the market has only been modestly penetrated. According to an analysis completed by the ARC Advisory Group, the total annual potential market for providing software licenses and related services to our three largest vertical markets of chemicals, petroleum and pharmaceuticals is expected to be \$12 billion in 2001, with the served market growing 30% annually until 2005. ARC estimates that new e-business solutions for the process industries are expected to expand the overall market and could accelerate the growth of the market faster in the future.

### **The AspenTech Advantage**

We are a leading provider of integrated software and services designed to help companies in the process industries operate more profitably by enabling them to manage and optimize their entire value chain – from the purchase of raw materials, through the production of products, to the delivery of final products to customers. The Aspen ProfitAdvantage solution incorporates our more than 20 years of experience in

optimizing process industry value chains as well as our best-in-class technologies and industry best practices. This industry experience and the breadth of our solution allow us to identify valuable new sources of profit for our customers, provide effective implementations with shorter time to benefit, optimize business processes and help our customers leverage more value from existing IT investments such as ERP systems.

We have built our reputation as a technology leader over nearly two decades by developing substantial domain expertise in chemical engineering, modeling, computer science and operations research. We believe we have achieved our market leadership in part by solving many challenging engineering, manufacturing and supply chain problems faced by the process industries.

Leading process manufacturers use our solutions to improve their competitiveness, not only by reducing raw material and energy use, cycle time, inventory cost and time to market, but increasingly by synchronizing and streamlining key business processes. Our competitive advantage is based on the following key attributes:

*Substantial Process Industry Expertise.* We believe we have amassed the world's largest collection of process industry domain knowledge to develop and implement our solution. Our founders and executives have pioneered many of the most significant advances that today are considered industry-standard solutions across a wide variety of engineering, manufacturing and supply chain applications. Our services and development staff are well qualified to deliver value to our customers based on the practical experience gained from supporting IT installations for more than 1,200 process companies worldwide.

This significant base of chemical engineering expertise, process manufacturing experience and industry know-how serves as the foundation for the proprietary solution methods, physical property models and data estimation techniques embedded in our software solution. We continually enhance our software applications through extensive interaction with our customers, some of which have worked with our products over the past twenty years. To complement our software expertise, we have assembled a staff of more than 500 project engineers to provide implementation, advanced process control, real-time optimization, supply chain management and other consulting services. We believe this consulting team is the largest of any competitive independent solution provider. Our expertise spans the process industry's vertical markets, from chemicals, petrochemicals and refining to pharmaceuticals, specialty chemicals and polymers, and others.

*Large and Valuable Customer Base.* We view our customer base of more than 1,200 process manufacturers as an important strategic asset and as evidence of one of the strongest franchises in the industry. We count among our customers 46 of the world's 50 largest chemical companies, 23 of the world's 25 largest petroleum refiners, and 18 of the world's 20 largest pharmaceutical companies. We also have numerous leading customers in other vertical markets. In addition, 17 of the 20 largest engineering and construction firms that serve these industries use our design software. These relationships enable us to identify and develop or acquire solutions that best meet the needs of our customers, and they are a valuable part of our efforts to penetrate the process industries with new software solutions. Our customer base is underpenetrated in the use of our solutions, particularly for our integrated value chain execution and our value chain planning solutions. As process manufacturers increasingly focus on integration and optimization of their extended supply chains, we expect many of our existing customers to be among the first to implement the integrated Aspen ProfitAdvantage solution.

*Rapid, High Return on Investment.* We believe that customers purchase our solutions because the solutions provide rapid, demonstrable and significant returns on investment. Because of the large production volumes and relatively low profit margins typical in many of the process industries, even small improvements in productivity can generate substantial recurring benefits. First-year savings can exceed the software and implementation costs of our solutions. Our integrated solution, whether applied across a plant, an enterprise or an extended supply chain, can yield even greater returns. In addition, our solutions generate important organizational efficiencies and operational improvements, the dollar benefits of which are difficult to estimate.

*Complete, Integrated Solution.* While some vendors offer stand-alone products that compete with one or more of our solutions, we believe we are the only provider that offers a comprehensive solution to process manufacturers that addresses key business processes across the value chain. Our solutions can be used on a stand-alone basis, integrated with one another or integrated with third-party applications. Customers can



initially choose to implement a point solution, which is scalable as needs evolve, or our integrated solution, which integrates multiple business processes within a single plant, across the enterprise and with customers, suppliers and other trading partners using our e-business solution. The breadth of our solutions expand the overall value we can bring to our customers and represent an important source of competitive differentiation.

*Demonstrated e-business Leadership.* Exploiting profit opportunities along the value chain requires collaboration with suppliers and customers to drive increased efficiency into the supply and demand processes. We have established our e-business leadership position in the process industries by linking private marketplace solutions with our industry-leading supply chain solutions to improve collaboration with key suppliers, customers and other trading partners. Our Aspen Buy and Aspen Sell private marketplace solutions are being used by chemical manufacturers to conduct direct materials procurement and to sell their products to customers over the Internet. Our private marketplace solutions for online procurement and sales reduce transaction costs and improve service. The power of these solutions can be increased by incorporating our solutions for real-time Capable-to-Promise, Collaborative Planning, Forecasting and Replenishment and Vendor-Managed Inventory, thereby delivering significant inventory reductions and major improvements to customer service.

With PetroVantage, we are developing the industry's only Internet-based, collaborative software solution to address the way the petroleum industry coordinates trading and logistics decisions and workflow among companies involved in evaluating, transporting and trading crude oil, intermediates and refined products.

## **Strategy**

Our strategy is to establish the Aspen ProfitAdvantage solution as the standard for the process manufacturing industries. The key elements of our strategy are:

*Extend Technology Leadership.* We believe we offer the most technologically advanced family of products available across the collaborative engineering, manufacturing, supply chain and e-business functions. In addition to addressing a broad range of challenges faced by process manufacturers, we believe many of our solutions are best-in-class, including process simulation, advanced process control, real-time optimization, scheduling and planning, process information management and supply chain management. Because these applications form the core of our integrated solution, we are committed to broadening and enhancing the functionality of our best-in-class products, as well as developing or acquiring additional industry-leading products to meet customer needs.

*Leverage Customers' Existing IT Investments.* Many process manufacturers have made significant investments in large, transactional systems such as ERP and other related IT investments. The full value of these investments has yet to be realized because the systems are not capturing real-time information from the plant manufacturing environment and information often needs to be entered into the system manually, resulting in inaccuracies. Our production optimization solution, Plantelligence, is an automated system that feeds real-time and accurate data from a plant's hardware into the ERP system, thus eliminating the problems customers are having in gaining value from these significant investments. Additionally, the solution brings greater operational efficiency to the plant by reducing fixed and variable costs, improving yields and increasing throughput capacity. By enabling a more comprehensive and accurate view of real-time plant performance, customers are able to maximize their profit opportunities along the value chain. Our strategy is to continue to leverage the value that our integrated solution can bring to our customers' existing IT investments as a way to grow our business.

*Focus on Integrated Aspen ProfitAdvantage Opportunities.* With the Aspen ProfitAdvantage solution, we are focused on selling the strategic value of our technology to the highest executive levels of the organization, typically the chief executive officer, chief financial officer or chief information officer. We believe that this solution provides significant benefits that can help to improve our customers' businesses and operating results. The Aspen ProfitAdvantage solution helps to integrate strategic components of process manufacturers' businesses to capture value that cannot be attained simply by deploying IT strategies at the divisional level. With the breadth of our solution, we intend to continue to focus substantial resources on extending the functionality of, quantifying the benefits of, marketing and selling, and accelerating the implementation of this

integrated solution. We believe we are the only provider of a truly integrated solution in the marketplace and will continue to focus on this solution as part of our strategy to provide greater incremental value than competitors only providing point solutions.

*Expand Competitive Differentiation Through Domain Knowledge.* We possess an extensive pool of intellectual capital, with exceptional expertise in chemical engineering, computer science, operations research and other process-relevant disciplines. To differentiate and accelerate implementation of our integrated solution, we have created vertical market-focused business units to develop and commercialize unique, cost-effective solutions that offer our customers best practice approaches to common industry-specific challenges. We also have applied our domain knowledge to create Business Process Templates, which target common business processes and provide easily configurable solutions. In addition, the expertise and process industry know-how of our project engineers speeds customer implementation of our solutions. We intend to continue to identify additional opportunities to accelerate adoption of our integrated solution by leveraging our extensive domain knowledge.

*Expand Partner Network.* In order to enhance our technology leadership position and augment our sales, marketing, development and implementation capabilities, we are expanding our network of partners. We are working closely with systems integrators and technology providers to identify opportunities for collaboration that we believe will speed our time to market with new products, extend our reach to potential customers and increase the resources available to implement our solutions. During fiscal 2001, we formed a relationship with Accenture to jointly develop, market and implement solutions for the process industries. We also elevated our systems integrator relationship with IBM to “Premier” status, the highest level that IBM designates for their software partner program. In addition to Accenture and IBM, we also have a systems integrator relationship with PricewaterhouseCoopers. Additionally, we have entered into strategic relationships with technology vendors such as Optimum Logistics, which provides an Internet-based open logistics system for bulk materials. In February 2001, we purchased a minority equity interest in Optimum Logistics from Optimum’s parent company, Stolt-Nielsen S.A., a transportation services company. These relationships take a variety of forms, including joint development and implementation, collaborative marketing and technology transfers, and involve various levels of financial commitment, including joint funding, equity investment and prepaid royalties. We believe these partnering arrangements will expand the market opportunities available to us, and we intend to continue to pursue similar alliances with other strategic parties.

*Continue to Make Strategic Investments and Acquisitions.* While we remain committed to internal product development as the most significant source of future opportunity, we intend to continue to take advantage of strategic investment and acquisition opportunities as they arise, especially those involving technologies that are complementary to our engineering, manufacturing, supply chain and e-business solutions or that can improve our solutions in our core vertical markets. These opportunities may include equity investments, acquisitions of products or technologies, and acquisitions of expertise that could enhance the overall attractiveness of our solutions. We will also consider these opportunities as part of our strategy to penetrate new vertical markets. We have derived a significant portion of our growth and solution breadth through investments in and acquisitions of products, expertise and technologies. Most recently, we acquired the Houston Consulting Group and Coppermine LLC, a subsidiary of CPU that was formed to operate CPU’s process applications business, in June 2001 to augment our supply chain scheduling and integration technologies.

## **Solutions: Software and Services**

The Aspen ProfitAdvantage solution consists of six key elements:

- *Aspen Value Process* — We first seek to develop the right IT strategy for the customer and identify areas of the enterprise where the customer can capture the greatest economic value.
- *Business Process Best Practices* — Using our proprietary methodology, we benchmark the customer’s current work processes against best practices for specific areas of the overall value chain.

- *Leading Process Industry Software* — The heart of our solution, this consists of integrated software solutions for asset optimization, value chain planning and value chain execution.
- *E-business Collaboration Capability* — This element of our solution enables the customer to collaborate more strategically and meaningfully over the Internet.
- *Implementation Services* — These services leverage our experienced implementation team to help the customer get rapid time-to-benefit as it implements our technology.
- *Global Services and Support* — We provide 24-hour global services and support for mission critical applications to help the customer sustain its performance in capturing economic benefits.

Although all elements of the Aspen ProfitAdvantage solution are critical to our customers, our process industry software makes up the heart of the solution. Our asset optimization software encompasses all of the collaborative engineering activities for process manufacturers. Our value chain planning solutions encompass our supply chain and e-business technologies to enable companies to create an optimal operating plan based on real-time marketplace constraints and opportunities. Our value chain execution software encompasses our integrated production optimization suite, our private marketplace and supply chain logistics technologies to help customers execute their optimal plans in real-time.

We have developed a comprehensive integration architecture, the Aspen Enterprise Solution Architecture, to link all of our products together seamlessly. We design our products to capture process knowledge in a consistent, accurate and reliable form based on models that customers can use as the basis for decision-making across the entire manufacturing life-cycle. These models and the associated captured knowledge in the supporting IT systems provide real-time, intelligent decision support across the manufacturing enterprise. Our software solutions can be linked with ERP solutions and DCS systems to improve a customer's ability to gather, analyze and use information across the process manufacturing life-cycle. In conjunction with our partners, our solutions are implemented by our global services team, and we offer customers a range of services in support of deployment and program management.

There are three main areas in the value chain where the Aspen ProfitAdvantage solution delivers significant competitive and economic advantages:

*Asset Optimization.* In the process industries, maximizing profit begins with design. Process manufacturers must be able to address a variety of challenging questions relating to strategic planning, collaborative engineering and debottlenecking and process improvement — from where they should locate their facilities to how they can make their products at the lowest cost to what is the best way to operate for maximum efficiency. To address these issues, they must improve asset optimization to enable faster, better execution of complex projects. Our Asset Optimization solutions help companies maximize their return on plant assets and collaborate with engineers on common models and projects. These solutions form the foundation for optimizing process manufacturers' supply chains and manufacturing facilities. By using our solutions to create and capture knowledge in the form of models, information can be re-used across the business. Profit improvements result from:

- reduced capital and operating costs;
- reduced time to operation;
- lowered manufacturing cost base and increased asset utilization;
- increased production flexibility and agility; and
- efficient execution of capital projects.



Some of our Asset Optimization products include the following:

<u>Software Solution</u>	<u>Description</u>	<u>Application</u>
Aspen Strategic Analyzer	Supply chain modeling tool for strategic planning	Manufacturing and distribution network design
Aspen Pinch	Process energy and capacity analysis	Process synthesis and analysis
Aspen Plus	Steady state simulation environment	Unit modeling and simulation
Aspen HETRAN	Heat exchanger design optimization, rating and simulation	Equipment sizing and rating
Batch Plus	Batch process modeling	Vertical application
Polymers Plus	Polymer steady state and batch modeling	Vertical application
Aspen Icarus	Economic evaluation of capital projects	Collaborative engineering
Aspen ZYQAD	Multi-user environment to store and share engineering data	Collaborative engineering

Our Asset Optimization tools are based on an open environment and are implemented on the Microsoft Windows operating system, while selected parts are available for implementation on UNIX and VMS systems. Implementation of our engineering solutions does not typically require substantial consulting services, although services may be provided for customized model designs and process synthesis.

*Value Chain Planning.* The ever-changing nature of the process industries means new profit opportunities can appear at any time. To identify and seize these opportunities, process manufacturers must be able to increase their visibility and collaboration across the value chain, optimize planning across the value chain, and detect and exploit supply chain opportunities. Our value chain planning solutions help companies develop their most optimal operating plans based on real-time demand and market trends. Business activities include demand management, supply and demand optimization and inventory planning. Profit improvements result from:

- improved responses to customer requirements;
- decreased planning costs;
- reduced inventory carrying costs; and
- decreased response times.

Some of the products in this area include:

<u>Software Solution</u>	<u>Description</u>
Aspen Demand Manager	Translates historical demand patterns into future forecasts
Aspen Collaborative Planning & Forecasting	Improves accuracy of production plans and forecasts
Aspen Inventory Planner	Calculates optimal inventory required to achieve targeted service levels
Aspen Production Planner	Develops an optimal plan for use of production inputs
Aspen PIMS	Refinery planning

*Value Chain Execution.* The process industries' typical production cycle offers many opportunities for optimizing profits. Process manufacturers must be able to address a wide range of issues driving execution efficiency and cost, from selecting the right feedstock and raw materials to production scheduling to identifying the right balance among customer satisfaction, costs and inventory. Our Value Chain Execution solutions support the execution of the optimal operating plan in real-time and include the key functions of

sourcing, making and delivering physical products to customers. We categorize our Value Chain Execution solutions in three main areas:

*Supply-side Optimization.* In the process industries, the selection of the right raw material has a significant impact on product quality and profitability. Because many products in the process industries can be made from a variety of raw materials using different techniques, there typically is far greater complexity in process manufacturing than in discrete manufacturing. In this environment, process manufacturers must be able to make quick decisions as to which feedstock is the most profitable. Profit improvements come from:

- increased margins from optimal feedstock selection;
- reduced raw material and logistics costs; and
- reduced inventory carrying costs.

Products in this area include Aspen Buy, Aspen PIMS, PetroVantage and Translink (through our alliance with Optimum Logistics).

*Production Optimization.* The plant is the center of uncertainty and cost in the process industries' supply chains. Our integrated production optimization solution, Plantelligence, provides real-time plant information to determine the optimum product mix at an individual manufacturing location, how a manufacturing facility's production schedule should be adjusted to meet an unexpected change in customer demand and how to operate the plant within safety and environmental constraints. Plantelligence is designed to integrate with a plant's hardware systems, ERP system and existing IT systems to optimize the operation of the plant. By uniting our products in a common framework, Plantelligence provides a comprehensive set of business improvements to process manufacturing plants. The applicable business processes include production scheduling, production management and production control. Profit improvements come from:

- increased production flexibility;
- increased capacity utilization, product yield and throughput;
- reduced product variability;
- improved margins; and
- higher average selling price through improved quality.

In addition to Plantelligence, some of our customers purchase point solutions for production optimization that are used within the plant. Some of these products include Aspen Advisor, Aspen MIMI, Aspen Plus Optimizer, Aspen Process Explorer, Aspen Production Manager, Aspen RefSked/Orion, ERP Connect and InfoPlus.21.

*Demand-Side Optimization.* These solutions are designed to help customers with near-term activities such as determining how to best balance customer satisfaction, costs and inventory. They are also used to more effectively translate customer inquiries into orders, determine in real-time whether to commit to a new order and provide a reliable delivery date, and determine how to deliver an order to a customer in the most reliable manner and at the lowest cost. Profit improvements come from:

- increased revenue and customer satisfaction;
- lower distribution and transportation costs;
- reduced inventory carrying costs;
- reduced transaction costs; and
- improved customer relationships.

Products in this area include Aspen Bulk, Aspen Capable-to-Promise, Aspen Retail, Aspen Sell and PetroVantage.

## **Services**

We offer implementation, advanced process control, real-time optimization and other consulting services in order to provide our customers with complete solutions. Customers typically use our Asset Optimization solutions without implementation assistance. Customers that purchase products from our integrated Value Chain Planning and Value Chain Execution solutions frequently require implementation assistance from us and our partners.

Customers who obtain consulting services from us typically engage us to provide such services over periods of up to 24 months. We generally charge customers for consulting services, ranging from supply chain to on-site advanced process control and optimization services on a fixed-price basis or time-and-materials basis.

As of August 31, 2001, we employed a staff of more than 560 project engineers to provide consulting services to our customers. We believe this large team of experienced and knowledgeable project engineers provides an important source of competitive differentiation. We primarily hire as project engineers individuals who have obtained doctoral or master's degrees in chemical engineering or a related discipline or who have significant relevant industry experience. Our employees include experts in fields including thermophysical properties, distillation, adsorption processes, polymer processes, industrial reactor modeling, the identification of empirical models for process control or analysis, large-scale optimization, supply distribution systems modeling and scheduling methods.

Historically, most licensees of our planning and scheduling solutions and a limited number of licensees of our process information management and supply chain management systems have obtained implementation consulting services from third-party vendors. Our strategy is to continue to develop and expand relationships with third-party consultants in order to provide a secondary channel of consulting services.

This year we expanded our service offerings to include remote hosting of some of our web-based solutions.

## **Partnerships**

Our partnerships, particularly with systems integrators, are a key part of our strategy to grow our business and accelerate the market penetration of our solutions. Historically, we have not had formal agreements in place with many leading systems integrators. However, as our solutions have evolved from point solutions to an integrated, enterprise-wide solution, systems integrators have grown in importance due to the limited resources of our services team and the IT integration skills that these companies can provide. Currently, we are focusing our efforts on our top three systems integrator relationships, Accenture, IBM Global Solutions and PricewaterhouseCoopers. These partners will be critical in enabling us to grow license revenues as quickly as possible and augmenting our current service capabilities, particularly in the area of business process reengineering and other related skills.

## **PetroVantage**

PetroVantage is our wholly owned subsidiary focused on creating collaborative, Internet-based software solutions for optimizing and coordinating trading and logistics decisions and workflow among companies involved in evaluating, transporting and trading crude oil, intermediates and refined products. PetroVantage is an important element of our end-to-end solution for the petroleum industry. Specifically, PetroVantage products are used in the Value Chain Execution component of the Aspen ProfitAdvantage solution to help companies "execute" their optimal operating plans based on real-time information and opportunities in the petroleum industry.

The economics of the downstream petroleum supply chain are complex and highly interdependent. As each barrel of crude oil or petroleum product moves along the supply chain, the trading and logistics decisions that are made about it have a significant impact on its profitability for its owner. More stringent and complex environmental petroleum regulations continue to create new challenges and opportunities for product traders

and marketers, as the demand for regionally specific components creates ever-increasing dependence on trading and product blending.

The PetroVantage collaborative software solution is designed to replace the time-consuming data gathering tasks and multiple approximations used in many of today's key trading and logistics decisions with fast and accurate optimization tools integrated with continuously updated data. It enables companies to track the execution of deals and associated logistics, and quickly identify costly deviations from planned timing and margins. At the same time, it provides a means for faster and better coordination of responses from the many individuals across multiple companies and locations that are required to drive higher profitability in critical operations.

Under the PetroVantage business model, customers commit to a term license for the software similar to traditional software based on parameters such as the number of users, the length of the commitment and the products licensed. Revenues from these licenses will be recognized ratably over the course of the license contract. In fiscal year 2001, we signed 10 pilot customers to test the beta version of the PetroVantage solution, and disclosed six of the 10 pilot customers: ITS/Caleb Brett, Occidental Energy Marketing, Premcor, Stone Oil, Williams Energy Partners and Williams Refining & Marketing. Since June 30, 2001, we are continuing to attempt to convert all 10 pilot customers into commercial licensees. To date, we have signed commercial agreements with five customers, of which three were pilot customers. We invested \$8.3 million in PetroVantage in fiscal 2001 and we anticipate recognizing the first revenues from PetroVantage in the fall of 2001.

### **Technology and Product Development**

Our base of chemical engineering expertise, process manufacturing experience and industry know-how serves as the foundation for the proprietary solution methods, physical property models and industry-specific business process knowledge embedded in our software solutions. Our software and services solutions combine three of our core competencies:

- We support sophisticated empirical models generated from advanced mathematical algorithms developed by our employees. In addition, we support rigorous models of chemical manufacturing processes and the equipment used in those processes. We have used these advanced algorithms to develop proprietary models that provide highly accurate representations of the chemical and physical properties of a broad range of materials typically encountered in the chemicals, petroleum and other process industries.
- We develop software that models key customer manufacturing and business processes and automates the workflow of these processes. This software integrates our broad product line so that the data used in manufacturing processes are seamlessly passed between the applications used in each step of the business processes.
- We have invested significantly in supply chain software, which embeds sophisticated technology allowing customers to optimize their extended supply chain activities. In addition, this software embeds key knowledge about the details of how manufacturing and supply chain operations function in the process industries.

Our product development activities are currently focused on strengthening the integration of our key products, expanding the set of business processes our software covers, exploiting web technology, and enhancing and simplifying the user interfaces. As of August 31, 2001, we employed a product development staff of more than 400 people.

## Customers

Our software solutions are installed at the facilities of more than 1,200 customers worldwide. The following table sets forth a partial selection of our customers from whom we generated at least \$300,000 of revenues in fiscal 2000 or 2001. For fiscal 2001, our license revenues consisted of the following: 45% in refining and petrochemicals, 16% in engineering and construction, 15% in life sciences and specialty chemicals, 7% in polymers and 17% in other segments of the process industries.

### **Chemicals and Petrochemicals**

Air Liquide  
Akzo Nobel  
AtoFina  
BASF AG  
BP  
BOC Group  
Celanese AG  
The Dow Chemical Company  
Equistar Chemicals, LP  
Huntsman Corporation  
Mitsubishi Chemical Corporation  
Mitsui Chemicals  
Nova Chemicals, Ltd.  
Shell  
Sasol

### **Consumer Goods and Packaging**

Cargill  
Conagra  
Iowa Beef Products  
Mother Parker's Coffee & Tea

### **Engineering and Construction, Licensor, Consulting, Research Institute**

Fluor Daniel  
Foster Wheeler  
Jacobs Engineering Group, Inc.  
JGC Corporation  
Kellogg Brown & Root (KBR)  
Lurgi AG

### **Life Sciences and Specialty Chemicals**

AstraZeneca  
Aventis Research & Technologies  
Bayer Corporation  
Baxter Healthcare  
Pfizer  
Hercules, Inc.  
Owens Corning  
Rohm and Haas Company  
Solutia Inc.  
UCB Chemicals

### **Refining, Oil and Gas**

BP  
Chevron Corporation  
Citgo Petroleum Corporation  
Exxon Mobil  
Lyondell Citgo Refining Company Ltd.  
PetroCanada  
PDVSA  
Phillips Petroleum Company  
Repsol Petroleo SA  
Shell Oil Company  
SK Corp Ltd  
Sinopec  
Statoil  
Sunoco Inc.  
Tosco Corporation  
Total-Fina  
Valero Refining Company  
Yukos

International revenues accounted for approximately 51.8% of our total revenues in fiscal 1999, 45.4% of our total revenues in fiscal 2000 and 48.8% of our total revenues in fiscal 2001.

## Sales and Marketing

We employ a value-based sales approach, offering customers a comprehensive suite of software and service solutions that enhance the efficiency and productivity of their process manufacturing operations. We have increasingly focused on selling our solutions as a strategic investment by our customers and therefore target our principal sales efforts at senior management levels, including chief executive officers and senior decision makers in manufacturing, operations and technology. We believe the launch of the Aspen ProfitAdvantage solution will help us to continue to focus and deliver our message for the chief executive, chief financial and chief information officers of our customers and that our ability to sell at senior levels within customer organizations is an important competitive advantage.



Because the complexity and cost of our solutions often result in a sales cycle of between six and nine months, we believe that the development of long-term, consultative relationships with our customers is essential to a successful selling strategy. To develop these relationships, we have organized our worldwide sales force by industry and region. We have also created a global account organization, focused on providing our Aspen ProfitAdvantage solution to our leading global customers. In order to market the specific functionality and other complex technical features of our software solutions, each sales account manager and global account manager works with specialized teams of regional account managers, technical sales engineers and product specialists organized for each sales and marketing effort. Our technical sales engineers typically have advanced degrees in chemical engineering or related disciplines and actively consult with a customer's plant engineers. Product specialists share their detailed knowledge of the specific features of our software solutions. Each sales team also includes participants from our business development group who determine the scope and price of service solutions offered to customers.

We currently have 12 direct sales offices in cities in the United States and 21 direct sales offices in cities outside of the United States, including Brussels, Cambridge (England), Dusseldorf, Hong Kong, Paris, Singapore and Tokyo. In geographic areas of lower customer concentration, we use sales agents and other resellers to leverage our direct sales force and to provide local coverage and first-line support. Our overall sales force, which consists of quota carrying sales account managers, sales services personnel, business support engineers, partner organization personnel, industry business unit professionals, marketing personnel, and support staff, exceeded 440 persons on August 31, 2001.

We supplement our direct sales efforts with a variety of marketing initiatives, including public relations activities, campaigns to promote awareness among industry analysts, user groups and our triennial conference, AspenWorld. AspenWorld has become a prominent forum for industry participants, including process manufacturing executives and analysts, to discuss emerging technologies and other process engineering solutions and to attend seminars led by industry experts. In addition to AspenWorld, we held our first multi-disciplinary User Group Meetings for customers around the world in early 2001.

We also license our software solutions at a substantial discount to universities that agree to use our solutions in teaching and research. We believe that students' familiarity with our solutions will stimulate future demand once the students enter the workplace. Currently, more than 650 universities use our software solutions in undergraduate instruction.

## **Competition**

Our markets are highly competitive. Our asset optimization software competes with products of businesses such as Hyprotech, a division of AEA Technology, and Simulation Sciences, a division of Invensys. Our value chain planning software competes with products of companies such as i2 Technologies, Manugistics and SAP. Our value chain execution competes with products of companies such as Honeywell's Hi-Spec division, Invensys and SAP. We also face competition in all three areas from large companies in the process industries that have developed their own proprietary software solutions. We compete primarily on the basis of reputation, product reliability and performance, product features and benefits, price and post-sale service and support.

Some of our current competitors have significantly greater financial, marketing and other resources than we have. In addition, many of our current competitors have established, and may in the future establish, cooperative relationships with third parties to improve their product offerings and to increase the availability of their products to the marketplace. The entry of new competitors or alliances into our market could reduce our market share, require us to lower our prices, or both. Many of these factors are outside our control, and we may not be able to maintain or enhance our competitive position against current and future competitors.

## **Intellectual Property**

We regard our software as proprietary and rely on a combination of copyright, patent, trademark and trade secret laws, license and confidentiality agreements, and software security measures to protect our proprietary rights. We have obtained or applied for patent protection in the United States with respect to some

of our intellectual property, but generally do not rely on patents as a principal means of protecting intellectual property. We have registered or applied to register some of our significant trademarks in the United States and in selected other countries.

We generally enter into non-disclosure agreements with our employees and customers, and historically have restricted access to our software products' source codes, which we regard as proprietary information. In a few cases, we have provided copies of the source codes for products to customers solely for the purpose of special product customization and have deposited copies of the source codes for products in third-party escrow accounts as security for ongoing service and license obligations. In these cases, we rely on non-disclosure and other contractual provisions to protect our proprietary rights.

The laws of many countries in which our products are licensed may not protect our products and intellectual property rights to the same extent as the laws of the United States. The laws of many countries in which we license our products protect trademarks solely on the basis of registration. We currently possess a limited number of trademark registrations in selected foreign jurisdictions and have applied for foreign copyright and patent registrations, which correspond to the United States trademarks, copyrights and patents described above, to protect our products in foreign jurisdictions where we conduct business.

The steps we have taken to protect our proprietary rights may not be adequate to deter misappropriation of our technology or independent development by others of technologies that are substantially equivalent or superior to our technology. Any misappropriation of our technology or development of competitive technologies could harm our business. We could incur substantial costs in protecting and enforcing our intellectual property rights.

Moreover, from time to time third parties may assert patent, trademark, copyright and other intellectual property rights to technologies that are important to our business. In such an event, we may be required to incur significant costs in litigating a resolution to the asserted claims. The outcome of any litigation might require that we pay damages or obtain a license of a third party's proprietary rights in order to continue licensing our products as currently offered. If such a license were required, it might not be available on terms acceptable to us, or at all.

We believe that the success of our business depends more on the quality of our proprietary software products, technology, processes and know-how than on trademarks, copyrights or patents. While we consider our intellectual property rights to be valuable, we do not believe that our competitive position in the industry is dependent simply on obtaining legal protection for our software products and technology. Instead, we believe that the success of our business depends primarily on our ability to maintain a leadership position in developing our proprietary software products, technology, information, processes and know-how. Nevertheless, we attempt to protect our intellectual property rights with respect to our products and development processes through trademark, copyright and patent registrations, both foreign and domestic, whenever appropriate as part of our ongoing research and development activities.

## **Employees**

As of August 31, 2001, we had a total of 1,927 full-time employees. None of our employees is represented by a labor union. We have experienced no work stoppages and believe that our employee relations are good.

## **Factors that may affect our operating results and stock price**

*A number of risks and uncertainties exist that could affect our future operating results, including the following.*

### **Risks Related to Our Business**

#### ***Our lengthy sales cycle makes it difficult to predict quarterly revenue levels and operating results.***

Because license fees for our software products are substantial and the decision to purchase our products typically involves members of our customers' senior management, the sales process for our solutions is lengthy and can exceed one year. Accordingly, the timing of our license revenues is difficult to predict, and the delay of an order could cause our quarterly revenues to fall substantially below expectations. Moreover, to the extent that we succeed in shifting customer purchases away from individual software solutions and toward more costly integrated suites of software and services, our sales cycle may lengthen and our average sales price may increase, which could increase the likelihood of delays and cause the effect of a delay to become more pronounced. We have limited experience in forecasting the timing of sales of our integrated suites of software and services. Delays in sales could cause significant shortfalls in our revenues and operating results for any particular period.

#### ***Fluctuations in our quarterly revenues, operating results and cash flow may cause the market price of our common stock to fall.***

Our revenues, operating results and cash flow have fluctuated in the past and may fluctuate significantly in the future as a result of a variety of factors, many of which are outside of our control, including:

- our customers' purchasing patterns;
- the length of our sales cycle;
- changes in the mix of our license revenues and service revenues;
- the timing of introductions of new solutions and enhancements by us and our competitors;
- seasonal weakness in the first quarter of each fiscal year, primarily caused by a slowdown in business in some of our international markets;
- the timing of our investments in new product development;
- changes in our operating expenses; and
- fluctuating economic conditions, particularly as they affect companies in the chemicals, petrochemicals and petroleum industries.

We ship software products within a short period after receipt of an order and typically do not have a material backlog of unfilled orders for software products. Consequently, revenues from software licenses in any quarter are substantially dependent on orders booked and shipped in that quarter. Historically, a majority of each quarter's revenues from software licenses has come from license agreements that have been entered into in the final weeks of the quarter. Therefore, even a short delay in the consummation of an agreement may cause our revenues to fall below public expectations for that quarter.

Since our expense levels are based in part on anticipated revenues, we may be unable to adjust spending quickly enough to compensate for any revenue shortfall and any revenue shortfall would likely have a disproportionately adverse effect on our operating results. We expect that these factors will continue to affect our operating results for the foreseeable future. Because of the foregoing factors, we believe that period-to-period comparisons of our operating results are not necessarily meaningful and should not be relied upon as indications of future performance.

As a result of lower-than-anticipated license revenues in our fiscal quarter ended March 31, 2001, our operating results for the quarter were below the expectations of public market analysts and many investors. As a result, the market price of our common stock declined substantially upon the announcement of our operating results. If, due to one or more of the foregoing factors or an unanticipated cause, our operating results fail to

meet the expectations of public market analysts and investors in a future quarter, the market price of our common stock would likely decline.

***Because we derive a majority of our total revenues from customers in the cyclical chemicals, petrochemicals and petroleum industries, our operating results may suffer if these industries experience an economic downturn.***

We derive a majority of our total revenues from companies in the chemicals, petrochemicals and petroleum industries. Accordingly, our future success depends upon the continued demand for manufacturing optimization software and services by companies in these process manufacturing industries. The chemicals, petrochemicals and petroleum industries are highly cyclical. In the past, worldwide economic downturns and pricing pressures experienced by chemical, petrochemical and petroleum companies have led to consolidations and reorganizations. These downturns, pricing pressures and restructurings have caused delays and reductions in capital and operating expenditures by many of these companies. These delays and reductions have reduced demand for products and services like ours. A recurrence of these industry patterns, as well as general domestic and foreign economic conditions and other factors that reduce spending by companies in these industries, could harm our operating results in the future.

***We will lose valuable strategic leadership and our customer relationships may be harmed if we lose the services of our chief executive officer or other key personnel.***

Our future success depends to a significant extent on Lawrence B. Evans, our chairman, president and chief executive officer, our other executive officers and a number of key engineering, technical, managerial and marketing personnel. The loss of the services of any of these individuals or groups of individuals could harm our business. None of our executive officers has entered into an employment agreement with us.

***If we are unable to successfully market our products to senior executives of potential customers, our revenue growth may be limited.***

With the introduction of the Aspen ProfitAdvantage solution, we are increasingly focused on selling the strategic value of our technology to the highest executive levels of customer organizations, typically the chief executive officer, chief financial officer or chief information officer. We have limited experience in selling and marketing at these levels. If we are not successful at selling and marketing to senior executives, our revenue growth and operating results could suffer.

***If we do not compete successfully, we may lose market share.***

Our markets are highly competitive. Our asset optimization software competes with products of businesses such as Hyprotech, a division of AEA Technology, and Simulation Sciences, a division of Invensys. Our value chain planning software competes with products of companies such as i2 Technologies, Manugistics and SAP. Our value chain execution competes with products of companies such as Honeywell's Hi-Spec division, Invensys and SAP. We also face competition in all three areas from large companies in the process industries that have developed their own proprietary software solutions.

Some of our current competitors have significantly greater financial, marketing and other resources than we have. In addition, many of our current competitors have established, and may in the future establish, cooperative relationships with third parties to improve their product offerings and to increase the availability of their products to the marketplace. The entry of new competitors or alliances into our market could reduce our market share, require us to lower our prices, or both. Many of these factors are outside our control, and we may not be able to maintain or enhance our competitive position against current and future competitors.

***If we are unable to develop relationships with systems integrators and other strategic partners, our revenue growth may be harmed.***

One element of our growth strategy is to increase the number of third-party implementation partners who market and integrate our products. If we do not adequately train a sufficient number of systems integrator partners, or if potential partners focus their efforts on integrating or co-selling competing products to the

process industries, our future revenue growth could be limited and our operating results could be harmed. If our partners fail to implement our solutions for our customers properly, the reputations of our solutions and our company could be harmed and we might be subject to claims by our customers. We intend to continue to establish business relationships with technology companies and new e-business entities to accelerate the development and marketing of our e-business solutions. To the extent that we are unsuccessful in maintaining our existing relationships and developing new relationships, our revenue growth may be harmed.

***If we fail to integrate the operations of the companies we acquire, we may not realize the anticipated benefits and our operating costs could increase.***

We intend to continue to pursue strategic acquisitions that will provide us with complementary products, services and technologies and with additional personnel. The identification and pursuit of these acquisition opportunities and the integration of acquired personnel, products, technologies and businesses require a significant amount of management time and skill. There can be no assurance that we will identify suitable acquisition candidates, consummate any acquisition on acceptable terms or successfully integrate any acquired business into our operations. Additionally, in light of the consolidation trend in our industry, we expect to face competition for acquisition opportunities, which may substantially increase the cost of any potential acquisition.

We have experienced in the past, and may experience again in the future, problems integrating the operations of a newly acquired company with our own operations. Acquisitions also expose us to potential risks, including diversion of management's attention, failure to retain key acquired personnel, assumption of legal or other liabilities and contingencies, and the amortization of goodwill and other acquired intangible assets. Moreover, customer dissatisfaction with, or problems caused by, the performance of any acquired products or technologies could hurt our reputation.

We may issue additional equity securities or incur long-term indebtedness to finance future acquisitions. The issuance of equity securities could result in dilution to existing stockholders, while the use of cash reserves or significant debt financing could reduce our liquidity and weaken our financial condition.

***If we fail to anticipate and respond to changes in the market for e-business solutions for process manufacturers, which is at a very early stage, our future revenue growth may be limited.***

The use of e-business solutions by process manufacturers is at an early stage and historically the process industries have not been early adopters of new business technologies. In addition, the market for e-business software and services for process manufacturing optimization is characterized by rapidly changing technology and customer needs. Our future success depends on our ability to enhance our current e-business offerings, to anticipate trends in the process industries regarding use of the Internet, and to develop in a timely and cost-effective manner new software and services that respond to evolving customer needs, emerging Internet technologies and standards, and competitive software and service offerings. We have invested, and intend to continue to invest from time to time, in e-business entities, such as Optimum Logistics, to accelerate the development and marketing of our e-business solution. If any of these e-business entities are not successful, our investment may be lost or substantially reduced in value.

***If use of the Internet or e-business does not continue to grow, our future operating results may suffer.***

The success of our e-business strategy is dependent on increasing demand for e-business products and solutions, and for increasing acceptance of use of the Internet for transacting business. Rapid growth in the use of the Internet and commercial online services is a recent phenomenon. Demand for recently introduced products and services over the Internet and online services is subject to a high level of uncertainty. The development of the Internet as a viable medium for the delivery of software applications is subject to number of factors, including:

- enterprises may be unwilling to shift their software selling and purchasing habits from traditional processes; and
- insufficient availability of telecommunications services or changes in telecommunications services could result in slower response times.



Critical issues concerning use of Internet-based business services are still unresolved and will likely affect use of these services. These issues include security, reliability, congestion, cost, ease of access and quality of service. Even if these issues are resolved, if the market for Internet-based business services fails to develop, or develops at a slower pace than anticipated, our business and operating results could be harmed.

***The growth of e-business and PetroVantage may be adversely affected by new laws or regulations relating to the Internet.***

We operate in an environment of uncertainty as to potential government regulation of the Internet. The Internet has rapidly emerged as a commercial medium, and governmental agencies have not yet been able to adapt all existing regulations to the Internet environment. Laws and regulations may be introduced and court decisions reached that affect the Internet or other online services, covering issues such as user pricing, user privacy, freedom of expression, access charges, content and quality of goods and services, advertising, intellectual property rights and information security. In addition, because we offer our software worldwide, foreign jurisdictions may claim that we are required to comply with their laws. Any future regulation may have a negative impact on our business by restricting our method of operation or imposing additional costs.

In addition, because our software applications may be delivered and used over the Internet anywhere in the world, multiple jurisdictions may claim that we are required to qualify to do business as a foreign corporation in each of those jurisdictions. Our failure to qualify as a foreign corporation in a jurisdiction where we are required to do so could subject us to taxes and penalties for the failure to qualify. In addition, state or foreign governments might allege or charge us with violations of local laws, we might unintentionally violate these laws, and these laws might be modified, or new laws might be enacted, in the future.

***Internet-based business services may be subject to sales and other taxes that could adversely affect our business.***

A number of legislative proposals have been made by federal, state, local and foreign governments that would impose additional taxes on the provision of goods and services over the Internet, and some states have taken measures to tax Internet-related activities. In October 1998, Congress placed a three-year moratorium on state and local taxes on Internet access or on discriminatory taxes on electronic commerce. Existing state and local laws were excluded from this moratorium. In May 2001, Congress extended this moratorium until October 2006. When this moratorium is ultimately lifted, some type of federal or state taxes may be imposed upon Internet commerce. The imposition of sales, value-added or similar taxes could make it more expensive to use our software platforms, diminish our competitiveness and harm our business and operating results.

***If we fail to protect the privacy of our e-business customers' information or to ensure the security of online transactions, we could have difficulty retaining our e-business customers.***

Concern about the security of the transmission of confidential information over public networks is a significant barrier to online services. Advances in computer capabilities, new discoveries in the field of cryptography, or other events or developments could result in compromises or breaches of Internet security systems that protect proprietary information. If any well-publicized compromises of security were to occur, they could substantially reduce interest in the Internet as a medium for delivering software applications, which would harm our business and operating results. In addition, one of the features of our software applications is the ability to develop and maintain profiles of consumers for use by businesses. Typically, these products capture profile information when consumers, business customers and employees visit an Internet website and volunteer information in response to survey questions. Our products augment these profiles over time by collecting usage data. Although our customers' management products are designed to operate with applications that protect user privacy, concerns about privacy may nevertheless cause visitors to resist providing the personal data necessary to support this profiling capability. If we cannot adequately address consumers' privacy concerns, these concerns could seriously harm our business, financial condition and operating results.

***The Internet is subject to rapid change, which could result in significant additional costs to us or in our products and services becoming obsolete.***

Markets for Internet-based products and services are characterized by rapidly changing technologies, frequent new product and service introductions, and evolving industry standards. The recent growth of the Internet and intense existing and emerging competition exacerbate these market characteristics. To succeed, we will need to adapt effectively to rapidly changing technologies and to improve continually the performance features and reliability of our software. We could incur substantial costs in modifying our software to adapt to these changes. Our technologies may also become obsolete, and we may lose customers and revenue if we fail to adapt our software to the rapid changes that are characteristic of the Internet.

***We may lose all or part of our investment in PetroVantage if the PetroVantage solution is not adopted by the market to the extent needed for us to recoup our investment.***

On September 14, 2000, we announced that we had formed PetroVantage, Inc. to develop a collaborative Internet-based software solution for optimizing and coordinating trading and logistics decisions and workflow among companies involved in evaluating, transporting and trading of crude oil, intermediates and refined products. We have invested \$8.3 million in PetroVantage and have committed to fund operations through at least the end of fiscal year 2002. We may lose all or a portion of our investment in PetroVantage if PetroVantage's collaborative software solution does not gain market acceptance, is unable to achieve profitability or positive cash flow, or otherwise fails to meet our expectations.

The operation of PetroVantage differs significantly from the operation of our traditional business, and PetroVantage has no operating history that can be used to evaluate its business and future prospects. The creation and maintenance of a new collaborative software solution for crude oil, intermediate petroleum products, and refined petroleum products is a new, rapidly evolving and intensely competitive business. There are competing software solutions and Internet sites that provide alternative ways to improve the performance of companies working in the petroleum market, and these companies may choose one of these alternatives over PetroVantage even though PetroVantage provides the benefits and workflow improvements we plan to provide.

***We may require additional capital.***

We may need to raise additional capital in order to fund the continued development and marketing of our solutions. We expect our current cash balances, availability of sales of our installment contracts, availability under our bank line of credit and cash flows from operations will be sufficient to meet our working capital and capital expenditure requirements for at least the next twelve months. However, we may need to obtain additional financing thereafter or earlier, if our current plans and projections prove to be inaccurate or our expected cash flows prove to be insufficient to fund our operations because of lower-than-expected revenues, unanticipated expenses or other unforeseen difficulties. Our ability to obtain additional financing will depend on a number of factors, including market conditions, our operating performance and investor interest. These factors may make the timing, amount, terms and conditions of any financing unattractive. They may also result in our incurring additional indebtedness or accepting stockholder dilution. If adequate funds are not available or are not available on acceptable terms, we may have to forego strategic acquisitions or investments, reduce or defer our development activities, or delay our introduction of new products and services. Any of these actions may seriously harm our business and operating results.

***We may suffer losses on fixed-price engagements.***

We derive a substantial portion of our total revenues from service engagements and a significant percentage of these engagements have been undertaken on a fixed-price basis. We bear the risk of cost overruns and inflation in connection with fixed-price engagements, and as a result, any of these engagements may be unprofitable. In the past, we have had cost overruns on fixed-price service engagements. In addition, to the extent that we are successful in shifting customer purchases to our integrated suites of software and services and we price those engagements on a fixed-price basis, the size of our fixed-price engagements may

increase, which could cause the impact of an unprofitable fixed-price engagement to have a more pronounced impact on our operating results.

***Our business may suffer if we fail to address the challenges associated with international operations.***

We have derived approximately 50% of our total revenues from customers outside the United States in each of the past three fiscal years. We anticipate that revenues from customers outside the United States will continue to account for a significant portion of our total revenues for the foreseeable future. Our operations outside the United States are subject to additional risks, including:

- unexpected changes in regulatory requirements, exchange rates, tariffs and other barriers;
- political and economic instability;
- difficulties in managing distributors and representatives;
- difficulties in staffing and managing foreign subsidiary operations;
- difficulties and delays in translating products and product documentation into foreign languages; and
- potentially adverse tax consequences.

The impact of future exchange rate fluctuations on our operating results cannot be accurately predicted. In recent years, we have increased the extent to which we denominate arrangements with international customers in the currencies of the countries in which the software or services are provided. From time to time we have engaged in, and may continue to engage in, hedges of a significant portion of installment contracts denominated in foreign currencies. Any hedging policies implemented by us may not be successful, and the cost of these hedging techniques may have a significant negative impact on our operating results.

***We may not be able to protect our intellectual property rights, which could make us less competitive and cause us to lose market share.***

We regard our software as proprietary and rely on a combination of copyright, patent, trademark and trade secret laws, license and confidentiality agreements, and software security measures to protect our proprietary rights. We have registered or have applied to register several of our significant trademarks in the United States and in certain other countries. We generally enter into non-disclosure agreements with our employees and customers, and historically have restricted access to our software products' source codes, which we regard as proprietary information. In a few cases, we have provided copies of the source code for products to customers solely for the purpose of special product customization and have deposited copies of the source code for some of our products in third-party escrow accounts as security for ongoing service and license obligations. In these cases, we rely on non-disclosure and other contractual provisions to protect our proprietary rights.

The steps we have taken to protect our proprietary rights may not be adequate to deter misappropriation of our technology or independent development by others of technologies that are substantially equivalent or superior to our technology. Any misappropriation of our technology or development of competitive technologies could harm our business, and could force us to incur substantial costs in protecting and enforcing our intellectual property rights. The laws of some countries in which our products are licensed do not protect our products and intellectual property rights to the same extent as the laws of the United States.

***We may have to defend against intellectual property infringement claims, which could be expensive and, if we are not successful, could disrupt our business.***

Third parties may assert patent, trademark, copyright and other intellectual property rights to technologies that are important to us. In such an event, we may be required to incur significant costs in litigating a resolution to the asserted claims. The outcome of any litigation could require us to pay damages or obtain a license to a third party's proprietary rights in order to continue licensing our products as currently offered. If such a license is required, it might not be available on terms acceptable to us, if at all.

***Our inability to manage our growth may harm our operating results.***

We have experienced substantial growth in recent years in the number of our employees, the scope of our operating and financial systems, and the geographic area of our operations. Our operations have expanded significantly through both internal growth and acquisitions. Our growth has placed, and is expected to continue to place, a significant strain on our management and our operating and financial systems. To manage our growth effectively, we must continue to expand our management team, attract, motivate and retain employees, and implement and improve our operating and financial systems. Our current management systems may not be adequate and we may not be able to manage any future growth successfully.

***Our software is complex and may contain undetected errors.***

Like many other complex software products, our software has on occasion contained undetected errors or “bugs.” Because new releases of our software products are initially installed only by a selected group of customers, any errors or “bugs” in those new releases may not be detected for a number of months after the delivery of the software. These errors could result in loss of customers, harm to our reputation, adverse publicity, loss of revenues, delay in market acceptance, diversion of development resources, increased insurance costs or claims against us by customers.

***We may be subject to significant expenses and damages because of liability claims.***

The sale and implementation of certain of our software products and services, particularly in the areas of advanced process control and optimization, may entail the risk of product liability claims. Our software products and services are used in the design, operation and management of manufacturing processes at large facilities, and any failure of our software could result in significant claims against us for damages or for violations of environmental, safety and other laws and regulations. Our agreements with our customers generally contain provisions designed to limit our exposure to potential product liability claims. It is possible, however, that the limitation of liability provisions in our agreements may not be effective as a result of federal, state or local laws or ordinances or unfavorable judicial decisions. A substantial product liability claim against us could harm our operating results and financial condition.

***Our common stock may experience substantial price and volume fluctuations.***

The equity markets have from time to time experienced extreme price and volume fluctuations, particularly in the high technology sector, and those fluctuations have often been unrelated to the operating performance of particular companies. In addition, factors such as our financial performance, announcements of technological innovations or new products by us or our competitors, as well as market conditions in the computer software or hardware industries, may have a significant impact on the market price of our common stock. In the past, following periods of volatility in the market price of a public companies securities, securities class action litigation has often been instituted against companies. This type of litigation could result in substantial costs and a diversion of management’s attention and resources.

**Item 2. *Properties***

Our principal offices occupy approximately 110,000 square feet of office space in Cambridge, Massachusetts. The lease of this office space expires on September 30, 2012. We also lease space for our Houston, Texas facilities. This lease encompasses approximately 245,000 square feet and expires March 1, 2012. In addition to these two facilities we and our subsidiaries also own or lease office space in San Diego, California; Rockville, Maryland; New Providence, New Jersey; Midlothian, Virginia; Bothell, Washington; LaHulpe, Belgium; Calgary, Alberta, Canada; Cambridge, England; Warrington, England; Hong Kong; Tokyo, Japan; Best, The Netherlands; Singapore; and other locations where additional sales and customer support offices are located. We believe that our existing and planned facilities are adequate for our needs for the foreseeable future and that, if additional space is needed, such space will be available on acceptable terms.

**Item 3. *Legal Proceedings***

We are not a party to any pending material proceedings. We may be a party to lawsuits in the normal course of our business. We note that securities litigation, in particular, can be expensive and disruptive to our normal business operations and the outcome of complex legal proceedings can be very difficult to predict.

**Item 4. *Submission of Matters to a Vote of Security Holders***

No matter was submitted to a vote of our security holders during the fourth quarter of fiscal 2001.



## PART II

### Item 5. *Market for Registrant's Common Equity and Related Stockholder Matters*

#### Market Information

Our common stock is traded on the Nasdaq National Market under the symbol "AZPN." The following table sets forth, for the periods indicated, the high and low sales prices per share of our common stock as reported by the Nasdaq National Market.

	<u>High</u>	<u>Low</u>
<b>Fiscal 2000:</b>		
First Quarter .....	\$13.875	\$ 8.125
Second Quarter .....	30.500	8.531
Third Quarter .....	55.375	27.375
Fourth Quarter .....	41.000	19.250
<b>Fiscal 2001:</b>		
First Quarter .....	50.188	28.000
Second Quarter .....	45.750	23.250
Third Quarter .....	41.125	17.875
Fourth Quarter .....	28.380	12.850

#### Holders

As of September 26, 2001, there were 1,263 holders of record of our common stock.

#### Dividends

We have never declared or paid cash dividends on our capital stock, although one of our subsidiaries paid dividends to its stockholders prior to its acquisition by us in fiscal 1995. We currently intend to retain all of our earnings, if any, in the foreseeable future. In addition, under the terms of our bank line of credit, we are prohibited from paying any cash dividends. Any future determination relating to dividend policy will be made at the discretion of our Board of Directors and will depend on a number of factors, including our future earnings, capital requirements, financial condition and future prospects and such other factors as the Board of Directors may deem relevant.

#### Sales of Unregistered Securities

On February 28, 2001, we acquired 3,439,000 convertible preferred shares of Optimum Logistics Ltd. As part of the consideration for the shares, we issued 219,515 shares of common stock to Stolt-Nielsen S.A. in a private placement exempt from registration under Section 4(2) of the Securities Act of 1933.

On June 15, 2001, we acquired Houston Consulting Group, L.P. In the acquisition, we issued 323,324 shares of common stock to the sole stockholder of Houston Consulting Group, L.P. in a private placement exempt from registration under Section 4(2) of the Securities Act of 1933.

On June 15, 2001, we acquired Coppermine LLC, a subsidiary of CPU that was formed to operate CPU's process applications business. In the acquisition, we issued 441,648 shares of common stock to the 13 stockholders of Coppermine in a private placement exempt from registration under Section 4(2) of the Securities Act of 1933.

# **Item 6. Selected Financial Data**

The following consolidated statement of operations data (other than pro forma data) for the years ended June 30, 1999, 2000 and 2001 and consolidated balance sheet data as of June 30, 2000 and 2001 have been derived from our consolidated financial statements that have been audited by Arthur Andersen LLP, independent public accountants, and are included elsewhere in this Form 10-K. The consolidated statement of operations data (other than pro forma data) for the years ended June 30, 1997 and 1998 and consolidated balance sheet data as of June 30, 1997, 1998 and 1999 have been derived from our consolidated financial statements that also have been audited by Arthur Andersen LLP but are not included in this Form 10-K. The selected consolidated financial data should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Form 10-K and the discussion under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Year Ended June 30,				
	1997	1998	1999	2000	2001
	(in thousands, except per share data)				
<b>Consolidated Statement of Operations Data:</b>					
Revenues:					
Software licenses . . . . .	\$103,822	\$140,857	\$ 97,108	\$132,843	\$147,448
Service and other . . . . .	91,480	113,879	129,411	135,250	163,176
Total revenues . . . . .	195,302	254,736	226,519	268,093	310,624
Expenses:					
Cost of software licenses . . . . .	5,539	8,178	7,899	9,605	11,856
Cost of service and other . . . . .	54,106	68,677	83,905	85,193	98,295
Selling and marketing . . . . .	56,139	75,060	85,664	91,863	113,608
Research and development . . . . .	33,714	43,793	48,625	51,567	68,913
General and administrative . . . . .	17,110	20,250	23,503	24,736	30,643
Costs related to acquisitions . . . . .	—	4,984	—	1,547	—
Restructuring and other charges . . . . .	—	—	17,867	—	6,969
Charge for in-process research and development . . . . .	8,664	8,472	—	—	9,915
Total expenses . . . . .	175,272	229,414	267,463	264,511	340,199
Income (loss) from operations . . . . .	20,030	25,322	(40,944)	3,582	(29,575)
Interest income . . . . .	5,588	5,784	10,092	9,847	10,268
Interest expense . . . . .	(151)	(377)	(5,677)	(5,563)	(5,469)
Write-off of investment . . . . .	—	—	—	—	(5,000)
Foreign currency exchange loss . . . . .	(236)	(454)	(94)	(118)	(81)
Income (loss) on equity in joint ventures and realized gain on sales of investments . . . . .	26	45	19	4	750
Income (loss) from before provision for (benefit from) income taxes . . . . .	25,257	30,320	(36,604)	7,752	(29,107)
Provision for (benefit from) income taxes . . . . .	10,178	14,109	(15,809)	2,324	(8,732)
Net income (loss) . . . . .	\$ 15,079	\$ 16,211	\$ (20,795)	\$ 5,428	\$ (20,375)
Pro forma net income (loss), reflecting provision for income taxes on Subchapter S-Corporation income . . . . .	\$ 14,822	\$ 15,781	\$ (22,066)	\$ 5,428	

	Year Ended June 30,				
	1997	1998	1999	2000	2001
	(in thousands, except per share data)				
Diluted net income (loss) per share . . . . .	\$ 0.59	\$ 0.59	\$ (0.76)	\$ 0.18	\$ (0.68)
Basic net income (loss) per share . . . . .	\$ 0.63	\$ 0.62	\$ (0.76)	\$ 0.19	\$ (0.68)
Pro forma diluted net income (loss) per share . . .	\$ 0.58	\$ 0.57	\$ (0.80)	\$ 0.18	
Weighted average shares outstanding — diluted . . .	25,348	27,524	27,476	30,785	29,941
Weighted average shares outstanding — basic . . . .	24,009	26,056	27,476	28,221	29,941
	June 30,				
	1997	1998	1999	2000	2001
	(in thousands)				

**Consolidated Balance Sheet Data:**

Cash and cash-equivalents . . . . .	\$ 18,550	\$ 78,969	\$ 34,039	\$ 49,371	\$ 36,633
Working capital . . . . .	74,104	173,589	153,987	169,380	127,414
Total assets . . . . .	203,895	344,432	325,023	364,945	406,594
Long-term obligations, less current maturities . . . .	462	90,635	89,405	88,173	88,149
Total stockholders' equity . . . . .	137,764	166,557	145,750	169,198	201,070

Basic and diluted net income (loss) per share and weighted average shares outstanding in the preceding table have been computed as described in note 2(i) to the consolidated financial statements included elsewhere in this Form 10-K. We have never declared or paid cash dividends on our capital stock.

## **Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations***

### **Overview**

Since our founding in 1981, we have developed and marketed software and services to companies in the process industries. In addition to internally generated growth, we have acquired a number of businesses, including Petrolsoft in the fourth quarter of fiscal 2000, ICARUS in the first quarter of fiscal 2001, Broner Systems in the second quarter of fiscal 2001, and the Houston Consulting Group and Coppermine LLC, a subsidiary of CPU that was formed to operate CPU's process applications business, in the fourth quarter of fiscal 2001.

We acquired ICARUS, Broner, the Houston Consulting Group and Coppermine in transactions accounted for as purchases. Our operating results include the operating results of these acquisitions only for periods subsequent to their respective dates of acquisition. See note 4 to the consolidated financial statements included elsewhere in this Form 10-K. We acquired Petrolsoft in a transaction accounted for as a pooling-of-interests. Accordingly, we have restated our consolidated financial statements to reflect the historic operations of Petrolsoft.

During August 2001, in light of further economic uncertainties, company management made a decision to further reduce spending. This reduction primarily consists of a reduction in worldwide headcount of approximately 5% of the workforce. As a result of these measures, we expect to record a restructuring charge of approximately \$3.0 million to \$5.0 million in the quarter ending September 30, 2001.

We typically license our asset optimization solutions for terms of three to five years and license our value chain solutions for terms of 99 years. See "Item 1. Business—Solutions: Software and Services."

License revenues, including license renewals, consist principally of revenues earned under fixed-term and perpetual software license agreements and are generally recognized upon shipment of the software if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence, or VSOE, exists for all undelivered elements. We determine VSOE based upon the price charged when the same element is sold separately. Maintenance and support VSOE represents a consistent percentage of the license fees charged to customers. Consulting services VSOE represents standard rates, which we charge our customers when we sell our consulting services separately. For an element not yet being sold separately, VSOE represents the price established by management having the relevant authority when it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace. Revenues under license arrangements, which may include several different software products and services sold together, are allocated to each element based on the residual method in accordance with SOP 98-9, "Software Revenue Recognition, with Respect to Certain Transactions." Under the residual method, the fair value of the undelivered elements is deferred and subsequently recognized when earned. We have established sufficient VSOE for professional services, training and maintenance and support services. Accordingly, software license revenues are recognized under the residual method in arrangements in which software is licensed with professional services, training and maintenance and support services. We use installment contracts as a standard business practice and have a history of successfully collecting under the original payment terms without making concessions on payments, products or services.

Maintenance and support services revenues are recognized ratably over the life of the maintenance and support contract period. Maintenance and support services include only unspecified rights to product upgrades and enhancements. These services are typically sold for a one-year term and are sold either as part of a multiple element arrangement with software licenses or are sold independently at time of renewal. We do not provide specified upgrades to our customers in connection with the licensing of our software products.

Service revenues from fixed-price contracts are recognized using the percentage-of-completion method, measured by the percentage of costs, primarily labor, incurred to date as compared to the estimated total costs, primarily labor, for each contract. When a loss is anticipated on a contract, the full amount thereof is provided currently. Service revenues from time-and-expense contracts and consulting and training revenues are recognized as the related services are performed. Services that have been performed but for which billings

have not been made are recorded as unbilled services, and billings that have been recorded before the services have been performed are recorded as unearned revenue in the accompanying consolidated balance sheets.

We license our software in U.S. dollars and several foreign currencies. We hedge material foreign currency-denominated receivables with specific hedge contracts in amounts equal to those receivables. While we have experienced minor foreign currency exchange gains or losses due to foreign exchange rate fluctuations, the impact of the gains or losses have not been material in any period. We do not expect fluctuations in foreign currencies to have a significant impact on either our revenues or our expenses in the foreseeable future.

Our operating costs include the amortization of intangible assets, including goodwill, arising from acquisitions accounted for as purchases. The net balance of these intangible assets as of June 30, 2001 was \$44.0 million and is being amortized over periods ranging from two to twelve years. The amortization from acquisitions that was charged to operations was \$3.0 million, \$2.4 million and \$6.1 million for fiscal 1999, 2000 and 2001, respectively.

In June 2001, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets." Under SFAS No. 142, companies will no longer amortize goodwill and certain other intangible assets with indefinite lives, but will instead assess for impairment using a fair-value-based test, on at least an annual basis. Effective July 1, 2001, we have adopted SFAS No. 142. We are currently assessing these assets for impairment, and have not yet determined whether or the extent to which they will affect the financial statements. We will stop amortizing a net carrying value of \$23.7 million of intangible assets as of July 1, 2001. The amortization associated with these intangible assets was \$1.3 million, \$1.0 million and \$2.6 million for fiscal 1999, 2000 and 2001, respectively. Amortization expense related to existing intangible assets with definite lives that will continue to be amortized pursuant to SFAS No. 142 will be approximately \$1.3 million per quarter in fiscal 2002, and will range from \$1.3 million to \$1.2 million per quarter in fiscal 2003 and from \$1.2 million to \$1.1 million per quarter in fiscal 2004. Thereafter, amortization expense related to existing intangible assets will continue to decline through fiscal 2009.

## Results of Operations

The following table sets forth the percentages of total revenues represented by certain consolidated statement of operations data for the periods indicated:

	Year Ended June 30,		
	1999	2000	2001
Revenues:			
Software licenses .....	42.9%	49.6%	47.5%
Service and other .....	57.1	50.4	52.5
Total revenues .....	100.0	100.0	100.0
Expenses:			
Cost of software licenses .....	3.5	3.6	3.8
Cost of service and other .....	37.0	31.8	31.6
Selling and marketing .....	37.8	34.3	36.6
Research and development .....	21.5	19.2	22.2
General and administrative .....	10.4	9.2	9.9
Costs related to acquisition .....	—	0.6	—
Restructuring and other charges .....	7.9	—	2.2
Charge for in-process research and development .....	—	—	3.2



	Year Ended June 30,		
	1999	2000	2001
Total expenses .....	118.1	98.7	109.5
Income (loss) from operations .....	(18.1)	1.3	(9.5)
Interest income .....	4.4	3.7	3.3
Interest expense .....	(2.5)	(2.1)	(1.8)
Write-off of investment .....	—	—	(1.6)
Other income (expense), net .....	—	—	0.2
Income (loss) before provision for (benefit from) income taxes .....	(16.2)	2.9	(9.4)
Provision for (benefit from) income taxes .....	(7.0)	0.9	(2.8)
Net income (loss) .....	<u>(9.2)%</u>	<u>2.0%</u>	<u>(6.6)%</u>

### Comparison of Fiscal 2001 to Fiscal 2000

*Revenues.* Revenues are derived from software licenses, consulting services and maintenance and training. Total revenues for fiscal 2001 increased 15.9% to \$310.6 million from \$268.1 million in fiscal 2000. Total revenues from customers outside the United States were \$151.6 million or 48.8% of total revenues and \$121.7 million or 45.4% of total revenues for fiscal 2001 and 2000, respectively. The geographical mix of revenues can vary from period to period.

Software license revenues represented 47.5% and 49.6% of total revenues for fiscal 2001 and 2000, respectively. Revenues from software licenses in fiscal 2001 increased 11.0% to \$147.4 million from \$132.8 million in fiscal 2000. Software license revenues are attributable to software license renewals covering existing users, the expansion of existing customer relationships through licenses covering additional users, licenses of additional software products, and, to a lesser extent, to the addition of new customers. Higher software license revenues in fiscal 2001 were driven by strong demand from the petroleum sector and a 44% increase in sales in the first half of the fiscal year compared to the first half of fiscal 2000. In the second half of fiscal 2001, we saw a general delay in decision making from many customers, which resulted in license revenues for the whole fiscal year 2001 being lower than our initially anticipated levels, but still higher than license revenues in fiscal 2000.

Revenues from service and other consist of consulting services, post-contract support on software licenses, training and sales of documentation. Revenues from service and other for fiscal 2001 increased 20.6% to \$163.2 million from \$135.3 million for fiscal 2000. This increase during fiscal 2001 reflects an improvement in our support and maintenance business resulting from the higher level of license revenues in fiscal 2001, as well as improvements in the pricing and utilization of our consulting services business, particularly within the value chain portion.

Historically, neither our joint venture or similar activities nor any discounting or similar activities have had a material effect on our revenues.

*Cost of Software Licenses.* Cost of software licenses consists of royalties, amortization of previously capitalized software costs, costs related to delivery of software, including disk duplication and third-party software costs, printing of manuals and packaging. Cost of software licenses for fiscal 2001 increased 23.4% to \$11.9 million from \$9.6 million in fiscal 2000. Cost of software licenses as a percentage of revenues from software licenses increased to 8.0% for fiscal 2001 from 7.2% for fiscal 2000. The increase in the total cost of software licenses is the result of increased license revenue volume, as well as increased fixed costs that we incurred during fiscal 2001.

*Cost of Service and Other.* Cost of service and other consists of the cost of execution of application consulting services, technical support expenses, the cost of training services and the cost of manuals that are sold as separate items. Cost of service and other for fiscal 2001 increased 15.4% to \$98.3 million from \$85.2 million for fiscal 2000. Cost of service and other as a percentage of revenues decreased to 60.2% for fiscal

2001 from 63.0% for fiscal 2000. Cost of service and other increased to support the expansion of these business segments. The decrease in the cost of service and other, as a percentage of revenues from service and other, was primarily the result of software maintenance revenues, which increased at a rate higher than the related costs, as well as increased revenues per hour and improved utilization rates of billable engineers during fiscal 2001.

*Selling and Marketing.* Selling and marketing expenses for fiscal 2001 increased 23.7% to \$113.6 million from \$91.9 million for fiscal 2000, while increasing as a percentage of total revenues to 36.6% from 34.3%. The increase in fiscal 2001 was attributable to an increased expense base to support a higher revenue level, particularly a higher license revenue level. We also continue to invest selectively in sales personnel and regional sales offices to improve our geographic proximity to our customers, to maximize the penetration of existing accounts and to add new customers. The increase in costs also was attributable to our continued investment in developing our partnership channels and relationships, the roll-out of certain e-business technologies, including PetroVantage, our investment in user group meetings, the addition of a new sales training program, the launch of a new advertising strategy to generate greater company awareness and the addition of costs relating to our acquisitions in fiscal 2001. The increase in sales and marketing expenses as a percentage of total revenues is primarily related to lower than anticipated revenues.

*Research and Development.* Research and development expenses consist of personnel and outside consultancy costs required to conduct our product development efforts. Capitalized research and development costs are amortized over the estimated remaining economic life of the relevant product, not to exceed three years. Research and development expenses for fiscal 2001 increased 33.6% to \$68.9 million from \$51.6 million for fiscal 2000, and increased as a percentage of total revenues to 22.2% from 19.2%. The increase in costs was attributable to the continued roll-out of our asset optimization and value chain solutions, including the addition of costs relating to the acquisitions of ICARUS and Broner, and the other acquisitions in fiscal 2001, and other e-business technologies, including a significant portion of the \$8.3 million invested in PetroVantage in fiscal 2001. The increase in research and development expenses as a percentage of total revenues is primarily related to lower than anticipated revenues. We capitalized 7.6% of our total research and development costs during fiscal 2001 as compared to 7.5% in fiscal 2000.

*General and Administrative.* General and administrative expenses consist primarily of salaries of administrative, executive, financial and legal personnel, outside professional fees and amortization of intangibles. General and administrative expenses for fiscal 2001 increased 23.9% to \$30.6 million from \$24.7 million for fiscal 2000, and increased as a percentage of total revenues to 9.9% from 9.2%. These increases were due primarily to the amortization of intangibles related to the acquisitions of ICARUS and Broner, and the other acquisitions in fiscal 2001, as well as additional personnel hired to support our growth. Amortization of intangible assets, including goodwill, was \$6.1 million and \$2.4 million in fiscal 2001 and fiscal 2000, respectively, an increase of 154.1% in fiscal 2001 as compared to the prior year.

*Restructuring and Other Charges.* In the third quarter of fiscal 2001, revenues were lower than our expectations as customers delayed spending due to the widespread slowdown in IT spending and the deferral of late-quarter purchasing decisions. Like many other software companies, we reduced our revenue expectations for the fourth quarter and for the fiscal year 2002. Based upon the impact of these reduced revenue expectations, management evaluated our current business and made significant changes, resulting in a restructuring plan for our operations. This restructuring plan included a reduction in headcount, a substantial decrease in discretionary spending and a sharpening of our e-business focus to emphasize our marketplace solutions and PetroVantage.

*Close-down/consolidation of facilities:* Approximately \$2.8 million of the restructuring charge relates to the termination of facility leases and other lease-related costs. The facility leases had remaining terms ranging from one month to six years. The amount accrued reflects our best estimate of the actual costs to buy-out leases or to sublease the underlying properties. Included in this amount is the write-off of certain assets, primarily leasehold improvements.

*Employee severance, benefits and related costs:* Approximately \$3.2 million of the restructuring charge relates to the reduction in headcount. Approximately 100 employees, or 5% of the workforce, were eliminated

under the changes to the business plan implemented by management. Areas impacted included sales and marketing, services, research and development, and general and administrative.

*Write-off of assets:* Approximately \$1.0 million of the restructuring and other charges relates to the write-off of the investment in e-business initiatives that were abandoned as a direct consequence of the change in business plan. The write-off was based on the residual amount remaining after our receipt of cash in winding-down some of the e-business initiatives in which we participated.

*Charge for In-Process Research and Development.* In connection with the acquisitions of ICARUS, Broner, certain assets and technologies of an Internet-based trading company, the Houston Consulting Group and Coppermine during fiscal 2001, approximately \$9.9 million of the aggregate purchase prices were allocated to in-process research and development projects based upon independent appraisals. These allocations represented the estimated fair value based on risk-adjusted cash flows related to the incomplete research and development projects. At the dates of acquisition, the development of these projects had not yet reached technological feasibility, and the research and development in progress had no alternative future uses. Accordingly, these costs were expensed as of the acquisition dates.

At the acquisition date, ICARUS was conducting design, development, engineering and testing activities associated with the completion of its next-generation product. This project involved developing a framework that will unify ICARUS' cost engine technology and user modules into one seamless architecture. At the acquisition date, the technologies under development ranged from 15 to 80 percent complete based on engineering man-month data and technological progress. Anticipated completion dates ranged from five to twelve months at an estimated cost of \$0.5 million.

At the acquisition date, Broner was conducting design, development, engineering and testing activities associated with the completion of several new additions to their product suite. The addition of these modules broadened Broner's product offerings to customers. At the acquisition date, the technologies under development ranged from 70 to 80 percent complete based on engineering man-month data and technological progress. Anticipated completion dates ranged from four to six months at an estimated cost of \$0.4 million.

At the acquisition date, the Internet-based trading company from which we purchased certain assets and technology was conducting design, development, engineering and testing activities associated with the completion of its next-generation e-commerce solution. The effort entailed redirecting technology and productizing certain offerings to attract a broader base of customers. At the acquisition date, the technologies under development ranged from 60 to 80 percent complete based on engineering man-month data and technological progress. Anticipated completion dates ranged from two to four months at an estimated cost of \$1.1 million.

At the acquisition date, Coppermine was conducting design, development, engineering and testing activities associated with its software, which facilitates integration of plant-centric applications in a real-time environment and connects to a range of applications, including our software, ERP systems and relational databases. At the acquisition date, the technologies under development ranged from 10 to 90 percent complete based on engineering man-month data and technological progress. Anticipated development costs are \$0.3 million over a seven-month period.

At the acquisition date, the Houston Consulting Group was conducting design, development, engineering and testing activities associated with its Orion refinery scheduling software, which will extend our supply chain planning and scheduling solutions for the petroleum industry. The efforts consisted primarily of development of additional capabilities in the blending and scheduling aspects of the Orion product family. At the acquisition date, the technologies under development ranged from 15 to 35 percent complete based on engineering man-month data and technological progress. Anticipated development costs are \$0.2 million over a five-month period.

In making each of these purchase price allocations, we considered present value calculations of income, an analysis of project accomplishments and remaining outstanding items and an assessment of overall contributions, as well as project risks. The values assigned to purchased in-process technology were determined by estimating the costs to develop the acquired technologies into commercially viable products,

estimating the resulting net cash flows from the projects, and discounting the net cash flows to their present values. The revenue projections used to value the in-process research and development were based on estimates of relevant market sizes and growth factors, expected trends in technology, and the nature and expected timing of new product introductions by us and our competitors. The resulting net cash flows from the projects are based on estimates of cost of sales, operating expenses, and income taxes from the projects. The rates utilized to discount the net cash flows to their present value were based on estimated cost of capital calculations. Due to the nature of the forecasts and the risks associated with the projected growth and profitability of the developmental projects, discount rates of 20 to 30 percent were considered appropriate for the in-process research and development. Risks related to the completion of technology under development include the inherent difficulties and uncertainties in achieving technological feasibility, anticipated levels of market acceptance and penetration, market growth rates and risks related to the impact of potential changes in future target markets.

*Interest Income.* Interest income is generated from investment of excess cash in short-term and long-term investments and from the license of software pursuant to installment contracts. Under these installment contracts, we offer a customer the option to make annual payments for its term licenses instead of a single license fee payment at the beginning of the license term. Historically, a substantial majority of the asset optimization customers have elected to license these products through installment contracts. Included in the annual payments is an implicit interest rate established by us at the time of the license. As we sell more perpetual licenses for value chain solutions, these sales are being paid for in forms that are generally not installment contracts. If the mix of sales moves away from installment contracts, interest income in future periods will be reduced. We sell a portion of the installment contracts to unrelated financial institutions. The interest earned by us on the installment contract portfolio in any one year is the result of the implicit interest rate established by us on installment contracts and the size of the contract portfolio. Interest income was \$10.3 million for fiscal 2001 as compared to \$9.8 million in fiscal 2000.

*Interest Expense.* Interest expense was incurred under our 5¼% convertible debentures, bank line of credit and capital lease obligations. Interest expense in fiscal 2001 decreased to \$5.5 million from \$5.6 million in fiscal 2000.

*Write-off of Investment.* In March 2000, we acquired 833,333 shares of e-Chemicals non-voting Series E Preferred Stock for \$6.00 per share. This investment entitled us to a minority interest in e-Chemicals and was accounted for using the cost method. During the second quarter of fiscal 2001, we deemed our investment in the stock of e-Chemicals to be worthless and this investment of \$5.0 million was written-off.

*Income (loss) on Equity in Joint Ventures and Realized Gain on Sales of Investments.* Income on equity in joint ventures and realized gain on sales of investments was \$750,000 in fiscal 2001 as compared to \$4,000 in fiscal 2000. In fiscal 2001, this primarily consisted of \$655,000 of realized gains on the partial sale of two investments and \$95,000 of income on equity in joint ventures.

*Provision for/Benefit from Income Taxes.* The effective tax rate in fiscal 2001 was calculated as a percentage of income or loss before taxes. The effective tax rate for each of fiscal 2001 and 2000 was 30.0%.

### **Comparison of Fiscal 2000 to Fiscal 1999**

*Revenues.* Total revenues for fiscal 2000 increased 18.4% to \$268.1 million from \$226.5 million in fiscal 1999. Total revenues from customers outside the United States were \$121.7 million or 45.4% of total revenues and \$117.3 million or 51.8% of total revenues for fiscal 2000 and 1999, respectively.

Software license revenues represented 49.6% and 42.9% of total revenues for fiscal 2000 and 1999, respectively. Revenues from software licenses in fiscal 2000 increased 36.8% to \$132.8 million from \$97.1 million in fiscal 1999. The lower license revenues in fiscal 1999 resulted primarily from delayed decision making driven by economic difficulties among customers in our core vertical markets of refining, chemicals and petrochemicals.

Revenues from service and other for fiscal 2000 increased 4.5% to \$135.3 million from \$129.4 million for fiscal 1999. This increase reflected a continued focus during fiscal 2000 on providing high value-added

consulting and training services to existing customers. Revenues from service and other for both fiscal 2000 and 1999 were adversely affected by lower-than-planned levels of consultant utilization. The lower utilization was attributable to the delay of project starts by clients. Growth in the services business was slower than our license business as a result of (1) our decision to utilize partners to help deploy our solutions and (2) the effect on post-contract support revenues of slower license revenue growth in prior periods.

*Cost of Software Licenses.* Cost of software licenses for fiscal 2000 increased 21.6% to \$9.6 million from \$7.9 million in fiscal 1999. Cost of software licenses as a percentage of revenues from software licenses decreased to 7.2% for fiscal 2000 from 8.1% for fiscal 1999. This decrease was primarily due to the spreading of fixed production and delivery costs over a larger revenue base.

*Cost of Service and Other.* Cost of service and other for fiscal 2000 increased 1.5% to \$85.2 million from \$83.9 million for fiscal 1999. Cost of service and other as a percentage of revenues from consulting services and maintenance and training decreased to 63.0% for fiscal 2000 from 64.8% for fiscal 1999. Cost of service and other increased to support the expansion of these business segments. The costs as a percentage of the service and other revenue decreased as operating efficiencies were realized as a result of the expansion of these business segments in fiscal 2000.

*Selling and Marketing.* Selling and marketing expenses for fiscal 2000 increased 7.2% to \$91.9 million from \$85.7 million for fiscal 1999 while decreasing as a percentage of revenues to 34.3% from 37.8%. The dollar increase in fiscal 2000 was attributable to an expense base that was increased to support a higher revenue level, particularly a higher license revenue level. As discussed above, the increase in license revenue for fiscal 2000 was significantly above the fiscal 1999 level.

*Research and Development.* Research and development expenses for fiscal 2000 increased 6.1% to \$51.6 million from \$48.6 million for fiscal 1999, while decreasing as a percentage of total revenues to 19.2% from 21.5%. The increase in costs principally reflected increased development of the Aspen Framework and the business process templates as the backbone of our Plantelligence solution and continued investment in development of our individual software solutions. Additionally, the increase was attributable to performance bonuses paid to employees under a program that had been in effect but was suspended as part of our cost-cutting program in fiscal 1999. We capitalized 7.5% of our total research and development costs during fiscal 2000 as compared to 5.7% in fiscal 1999. This increase was primarily attributable to the capitalization of development costs related to major releases of products in fiscal 2000.

*General and Administrative.* General and administrative expenses for fiscal 2000 increased 5.2% to \$24.7 million from \$23.5 million for fiscal 1999 and decreased as a percentage of total revenues to 9.2% from 10.4%. These costs did not grow at the same rate as revenues, as our infrastructure was able to support a larger revenue base; however, the increased dollar amounts reflect the growth in the scale and scope of our operations. Additionally, the increase was attributable to performance bonuses paid to employees under a program that had been in effect but was suspended as part of our cost-cutting program in fiscal 1999.

*Interest Income.* Interest income was \$9.8 million for fiscal 2000 as compared to \$10.1 million in fiscal 1999.

*Interest Expense.* Interest expense was incurred under our 5¼% convertible debentures, bank line of credit and capital lease obligations. Interest expense in fiscal 2000 decreased to \$5.6 million from \$5.7 million in fiscal 1999.

*Provision for/Benefit from Income Taxes.* The effective tax rate in fiscal 2000 was calculated as a percentage of income before taxes. The effective tax rate changed for fiscal 2000 to 30.0% of pre-tax income as compared to 43.2% of pre-tax loss for fiscal 1999. This change was primarily due to the generation and utilization of tax credits, including foreign tax credits.

## Quarterly Results

Our operating results and cash flow have fluctuated in the past and may fluctuate significantly in the future as a result of a variety of factors, including purchasing patterns, timing of introductions of new solutions



and enhancements by us and our competitors, and fluctuating economic conditions. Because license fees for our software products are substantial and the implementation of our solutions often requires the services of our engineers over an extended period of time, the sales process for our solutions is lengthy and can exceed one year. Accordingly, software revenues are difficult to predict, and the delay of any order could cause our quarterly revenues to fall substantially below expectations. Moreover, to the extent that we succeed in shifting customer purchases away from point solutions and toward integrated solutions, the likelihood of delays in ordering may increase and the effect of any delay may become more pronounced.

We ship software products within a short period after receipt of an order and usually do not have a material backlog of unfilled orders of software products. Consequently, revenues from software licenses, including license renewals, in any quarter are substantially dependent on orders booked and shipped in that quarter. Historically, a majority of each quarter's revenues from software licenses has been derived from license agreements that have been consummated in the final weeks of the quarter. Therefore, even a short delay in the consummation of an agreement may cause revenues to fall below expectations for that quarter. Since our expense levels are based in part on anticipated revenues, we may be unable to adjust spending in a timely manner to compensate for any revenue shortfall and any revenue shortfall would likely have a disproportionately adverse effect on net income. We expect that these factors will continue to affect our operating results for the foreseeable future.

In each of fiscal 2000 and 2001, we experienced a net loss for the first quarter, in part because a substantial portion of our total revenues was derived from countries other than the United States where business is slow during the summer months and also in part because of the timing of renewals of software licenses. We believe that we may continue to experience challenges in growing total revenues and net income in the first fiscal quarter as compared to the immediately preceding fiscal quarter. Because of the foregoing factors, we believe that period-to-period comparisons of our operating results are not necessarily meaningful and should not be relied upon as indications of future performance.

The following table presents selected quarterly consolidated statement of operations data for fiscal 2000 and 2001. These data are unaudited but, in our opinion, reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of these data in accordance with accounting principles generally accepted in the United States.

	Fiscal 2000				Fiscal 2001			
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
	(in thousands)							
Revenues:								
Software licenses .....	\$21,507	\$29,318	\$34,746	\$47,272	\$32,582	\$40,630	\$34,224	\$ 40,012
Service and other .....	31,845	33,166	34,158	36,081	36,906	41,057	42,201	43,012
Total revenues .....	53,352	62,484	68,904	83,353	69,488	81,687	76,425	83,024
Expenses:								
Cost of software licenses .....	2,076	2,187	2,467	2,875	2,565	2,999	3,141	3,151
Cost of service and other .....	20,138	20,805	21,546	22,704	22,320	24,544	25,697	25,734
Selling and marketing .....	19,328	20,820	22,819	28,896	24,718	27,704	29,340	31,846
Research and development .....	11,722	11,774	12,942	15,129	14,992	16,568	18,590	18,763
General and administrative .....	5,568	5,748	6,012	7,408	6,565	7,600	8,289	8,189
Costs related to acquisition .....	—	—	—	1,547	—	—	—	—
Restructuring charge .....	—	—	—	—	—	—	—	6,969
Charge for in-process research and development .....	—	—	—	—	5,000	2,615	—	2,300
Total expenses .....	58,832	61,334	65,786	78,559	76,160	82,030	85,057	96,952
Income (loss) from operations .....	(5,480)	1,150	3,118	4,794	(6,672)	(343)	(8,632)	(13,928)
Interest income, net .....	981	1,015	1,100	1,111	1,541	1,328	1,052	878
Write-off of investment .....	—	—	—	—	—	(5,000)	—	—
Other income (expense), net .....	50	(51)	(106)	70	(134)	252	(99)	650



	Fiscal 2000				Fiscal 2001			
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
	(in thousands)							
Income (loss) before provision for (benefit from)								
income taxes .....	(4,449)	2,114	4,112	5,975	(5,265)	(3,763)	(7,679)	(12,400)
Provision for (benefit from) income taxes .....	(1,379)	785	1,507	1,411	(1,580)	(1,128)	(2,304)	(3,720)
Net income (loss) .....	<u>\$ (3,070)</u>	<u>\$ 1,329</u>	<u>\$ 2,605</u>	<u>\$ 4,564</u>	<u>\$ (3,685)</u>	<u>\$ (2,635)</u>	<u>\$ (5,375)</u>	<u>\$ (8,680)</u>

## Liquidity and Capital Resources

In recent years, we have financed our operations principally through cash generated from public offerings of our 5¼% convertible debentures and common stock, operating activities, the sale of installment contracts to third parties and, at times during the year, borrowings under a bank line of credit.

In the fourth quarter of fiscal 1998, we received a total of \$82.4 million from our sale of the 5¼% convertible debentures. A portion of these net proceeds was used for working capital and other general corporate purposes. We evaluate on an ongoing basis potential opportunities to acquire or invest in technologies, products, services, businesses or engineering personnel that expand, complement or are otherwise related to our current business and products.

In fiscal 2001, operating activities used \$13.4 million of cash primarily as a result of the net loss and increases in accounts receivable, unbilled services, and long-term installments receivable, and a decrease in deferred revenue, which were offset in part by increases in accounts payable, accrued expenses and unearned revenue. In fiscal 1999 and 2000, operating activities used \$3.6 million and provided \$28.0 million of cash, respectively.

In fiscal 2001, investing activities used \$13.7 million of cash primarily as a result of cash used in the purchase of businesses, particularly ICARUS and Broner, purchases of property and leasehold improvements, and an increase in computer software development costs, which were offset in part by a net decrease in short-term investments and proceeds from the sale of property. In fiscal 1999 and 2000, investing activities used \$41.7 million and \$21.9 million of cash, respectively.

In recent years, we have had arrangements to sell long-term contracts to two financial institutions, General Electric Capital Corporation and Fleet Business Credit Corporation (formerly Sanwa Business Credit Corporation). These contracts represent amounts due over the life of existing term licenses. During fiscal 2001, installment contracts increased by \$21.3 million to \$74.5 million, net of \$55.6 million of installment contracts sold to General Electric Credit Corporation and Fleet Business Credit Corporation. Included in this net increase is the addition of \$7.2 million of installments receivable in connection with the acquisition of ICARUS. During fiscal 2000, installment contracts decreased by \$4.0 million to \$53.2 million, net of \$28.0 million of installment contracts sold to General Electric Capital Corporation and Fleet Business Credit Corporation. During fiscal 1999, installment contracts increased by \$3.4 million to \$57.2 million, net of \$32.3 million of installment contracts sold to General Electric Capital Corporation and Fleet Business Credit Corporation. Our arrangements with these two financial institutions provide for the sale of installment contracts up to certain limits and with certain recourse obligations. At June 30, 2001, June 30, 2000 and June 30, 1999, the balance of the uncollected principal portion of the contracts sold to these two financial institutions was \$108.5 million, \$90.2 million and \$91.5 million, respectively, for which we had partial recourse obligations of \$6.2 million, \$6.0 million and \$3.8 million, respectively. The availability under these arrangements will increase as the financial institutions receive payment on installment contracts previously sold.

We maintain a \$30.0 million unsecured bank line of credit, expiring October 26, 2003, that provides for borrowings of specified percentages of eligible accounts receivable and eligible current installment contracts. Advances under the line of credit bear interest at a rate equal to the bank's prime rate (6.75% at June 30, 2001) or, at our option, a rate equal to a defined LIBOR (4.18% at June 30, 2001) plus a specified margin. The line of credit agreement requires us to provide the bank with certain periodic financial reports and to comply with certain financial tests, including maintenance of minimum levels of consolidated net worth and of

the ratio of cash and cash equivalents, accounts receivable and current portion of our long-term installments receivable to current liabilities. At June 30, 2001, there were no outstanding borrowings under the line of credit.

As of June 30, 2001, we had cash and cash-equivalents totaling \$36.6 million, as well as short-term investments totaling \$31.0 million. Our commitments as of June 30, 2001 consisted primarily of leases on our headquarters and other facilities. See “Item 2. Properties.” Other than our \$2.1 million remaining capital commitment for Optimum Logistics and a \$1.2 million capital commitment for a joint venture in Japan, there were no other material commitments for capital or other expenditures. We believe our current cash balances, availability of sales of our installment contracts, availability under our bank line of credit and cash flows from our operations will be sufficient to meet our working capital and capital expenditure requirements for at least the next 12 months. We may, however, seek to take advantage of favorable market conditions by raising additional funds from time to time through public or private security offerings, debt financings, strategic alliances or other financing sources.

### **Inflation**

Inflation has not had a significant impact on our operating results to date and we do not expect inflation to have a significant impact during fiscal 2002.

### **Item 7A. Quantitative and Qualitative Market Disclosures**

Information relating to quantitative and qualitative disclosure about market risk is set forth in notes 2(c), 2(d), 2(h), 2(k) and 12 to our consolidated financial statements included elsewhere in this Form 10-K and below under the captions “Investment Portfolio” and “Foreign Exchange Hedging.”

### **Investment Portfolio**

We do not use derivative financial instruments in our investment portfolio. We place our investments in instruments that meet high credit quality standards, as specified in our investment policy guidelines; the policy also limits the amount of credit exposure to any one issuer and the types of instruments approved for investment. We do not expect any material loss with respect to our investment portfolio. The following table provides information about our investment portfolio. For investment securities, the table presents principal cash flows and related weighted average interests rates by expected maturity dates.

**Principal (Notional) Amounts by Expected Maturity in U.S. Dollars**  
(in thousands, except interest rates)

	Fair Value at June 30, 2001	Maturing in Fiscal Year Ending June 30,				
		2002	2003	2004	2005	2006 and Thereafter
Cash Equivalents.....	\$36,633	\$36,633	—	—	—	—
Weighted Average Interest Rate.....	3.77%	3.77%	—	—	—	—
Investments .....	\$31,005	\$19,662	\$7,648	\$1,538	\$2,157	—
Weighted Average Interest Rate.....	5.93%	5.63%	6.22%	7.09%	6.82%	—
Total Portfolio .....	\$67,638	\$56,295	\$7,648	\$1,538	\$2,157	—
Weighted Average Interest Rate.....	4.76%	4.42%	6.22%	7.09%	6.82%	—

### **Impact of Foreign Currency Rate Changes**

During fiscal 2001, the U.S. dollar strengthened against currencies for countries in which we have local operations, primarily in Europe and the Asia-Pacific region. The translation of our intercompany receivables and payables and of our foreign entities’ assets and liabilities did not have a material impact on our

consolidated operating results. Foreign exchange forward contracts are only purchased to hedge certain customer accounts receivable amounts denominated in a foreign currency.

Effective January 1, 1999, the functional currency of several of our foreign subsidiaries was changed from the U.S. dollar to the respective foreign currency. This change was made based on significant changes in economic facts and circumstances related to our operations in those foreign countries.

### Foreign Exchange Hedging

We enter into foreign exchange forward contracts to reduce our exposure to currency fluctuations on customer accounts receivable denominated in foreign currencies. The objective of these contracts is to limit the impact of foreign currency exchange rate movement on our operating results. We do not use derivative financial instruments for speculative or trading purposes. We had \$9.4 million of foreign exchange forward contracts denominated in Japanese, British, Swiss, French, Thai, German, Dutch and Euro currencies which represented underlying customer accounts receivable transactions at the end of fiscal 2001. We adopted SFAS 133 in the first quarter of fiscal 2001. As a result, at each balance sheet date, the foreign exchange forward contracts and the related installments receivable denominated in foreign currencies are revalued based on the current market exchange rates. Resulting gains and losses are included in earnings or deferred as a component of other comprehensive income. These deferred gains and losses are recognized in income in the period in which the underlying anticipated transaction occurs. Gains and losses related to these instruments for fiscal 2001 were not material to our financial position. We do not anticipate any material adverse effect on our consolidated financial position, operating results or cash flows resulting from the use of these instruments. There can be no assurance, however, that these strategies will be effective or that transaction losses can be limited or forecasted accurately.

The following table provides information about our forward contracts, at the end of fiscal 2001, to sell foreign currencies for U.S. dollars. All of these contracts relate to customer accounts and installments receivable. The table presents the value of the contracts in U.S. dollars at the contract exchange rate as of the contract maturity date. The average contract rate approximates the weighted average contractual foreign currency exchange rate and the forward position in U.S. dollars approximates the fair value on the contract at the end of fiscal 2001.

<u>Currency</u>	<u>Average Contract Rate</u>	<u>Forward Amount in U.S. Dollars (in thousands)</u>	<u>Contract Origination Date</u>	<u>Contract Maturity Date</u>
British Pound Sterling . . .	1.48	\$3,435	Various: Jul 99 – Jun 01	Various: Jul 01 – Feb 03
Japanese Yen . . . . .	108.62	3,349	Various: Jan 99 – May 01	Various: Jul 01 – Mar 03
Euro (EUR) . . . . .	0.89	625	Various: Feb 01– Jun 01	Various: Jul 01 – Mar 03
Swiss Franc . . . . .	1.64	611	Various: Jul 99 – Nov 00	Various: Feb 02 – Dec 02
Thailand Bhat . . . . .	43.20	475	Various: Jan 01	Various: Jan 02
German Deutsche Mark	2.12	447	Various: Apr 99 – Jan 01	Various: Jul 01 – Mar 03
French Franc . . . . .	7.10	424	Various: Jan 99 – Nov 00	Various: Jul 01 – Dec 02
Netherland Guilder . . . . .	2.40	28	Various: Aug 00 – Aug 01	Various: Aug 01 – Aug 02
Total . . . . .		<u>\$9,394</u>		

### Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements are listed in the Index to Consolidated Financial Statements filed in Item 14(a)(i) as part of this Form 10-K.

### Item 9. Changes in and Disagreements With Accountants On Accounting and Financial Disclosure

There have been no changes or disagreements with accountants on accounting or financial disclosure matters during our two most recent fiscal years.

### **PART III**

#### **Item 10. *Directors and Executive Officers of the Registrant***

The information required under this Item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than October 28, 2001, under the heading "Election of Directors."

#### **Item 11. *Executive Compensation***

The information required under this Item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than October 28, 2001, under the heading "Executive Officer Compensation."

#### **Item 12. *Security Ownership of Certain Beneficial Owners and Management***

The information required under this Item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than October 28, 2001, under the heading "Share Ownership of Principal Stockholders and Management."

#### **Item 13. *Certain Relationships and Related Transactions***

The information required under this Item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than October 28, 2001, under the heading "Related Party Transactions."

## PART IV

### Item 14. *Exhibits, Financial Statement Schedules, and Reports On Form 8-K*

#### (a)(1) **Financial Statements**

<u>Description</u>	<u>Page</u>
Report of Independent Public Accountants .....	F-2
Consolidated Financial Statements:	
Balance Sheets as of June 30, 2000 and 2001 .....	F-3
Statements of Operations for the years ended June 30, 1999, 2000 and 2001 .....	F-4
Statements of Stockholders' Equity for the years ended June 30, 1999, 2000 and 2001 ..	F-5
Statements of Cash Flows for the years ended June 30, 1999, 2000 and 2001 .....	F-6
Notes to Consolidated Financial Statements .....	F-7

#### (a)(2) **Financial Statement Schedules**

<u>Description</u>	<u>Page</u>
Report of Independent Public Accountants on Schedule .....	S-1
Schedule II – Valuation and Qualifying Accounts .....	S-2

All other schedules are omitted because they are not required or the required information is shown in the consolidated financial statements or notes thereto.

#### (a)(3) **Exhibits**

- 3.1(1) Certificate of Incorporation of Aspen Technology, Inc.
- 3.2(1) By-laws of Aspen Technology, Inc.
- 4.1(2) Specimen Certificate for Shares of Aspen Technology, Inc.'s common stock, \$.10 par value.
- 4.2(1) Rights Agreement dated as of March 12, 1998 between Aspen Technology, Inc. and American Stock Transfer and Trust Company, as Rights Agent, including related forms of the following: (a) Certificate of Designation of Series A Participating Cumulative Preferred Stock of Aspen Technology, Inc.; and (b) Right Certificate.
- 4.3(3) Indenture dated as of June 17, 1998 between Aspen Technology, Inc. and The Chase Manhattan Bank, as trustee, with respect to up to \$86,250,000 principal amount of 5¼% Convertible Subordinated Debentures due June 15, 2005 of Aspen Technology, Inc.
- 4.4(3) Form of 5¼% Convertible Subordinated Debentures due June 15, 2005 of Aspen Technology, Inc. (included in Sections 2.2, 2.3 and 2.4 of the Indenture filed as Exhibit 4.1 to the Current Report on Form 8-K).
- 10.1(4) Lease Agreement dated as of January 30, 1992 between Aspen Technology, Inc. and Teachers Insurance and Annuity Association of America regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.2(10) First amendment to Lease Agreement dated May 5, 1997 between Aspen Technology, Inc. and Beacon Properties, L.P., successor-in-interest to Teachers Insurance and Annuity Association of America, regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.3(10) Second Amendment to Lease Agreement dated as of August 14, 2000 between Aspen Technology, Inc. and EOP-Ten Canal Park, L.L.C., successor-in-interest to Beacon Properties, L.P. regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.4(4) System License Agreement between Aspen Technology, Inc. and the Massachusetts Institute of Technology, dated March 30, 1982, as amended.
- 10.5(4)† Non-Equilibrium Distillation Model Development and License Agreement between Aspen Technology, Inc. and Koch Engineering Company, Inc., as amended.

- 10.6(4)† Letter, dated October 19, 1994, from Aspen Technology, Inc. to Koch Engineering Company, Inc., pursuant to which Aspen Technology, Inc. elected to extend the term of Aspen Technology, Inc.'s license under the Non-Equilibrium Distillation Model Development and License Agreement.
- 10.7(4)† Batch Distillation Computer Program Development and License Agreement between Process Simulation Associates, Inc. and Koch Engineering Company, Inc.
- 10.8(4)† Agreement between Aspen Technology, Inc. and Imperial College of Science, Technology and Medicine regarding Assignment of SPEEDUP.
- 10.9(4) Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 10.10(6) Rider No. 1, dated December 14, 1994, to Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 10.11(4)† Letter Agreement between Aspen Technology, Inc. and Sanwa Business Credit Corporation.
- 10.12(4) Equity Joint Venture Contract between Aspen Technology, Inc. and China Petrochemical Technology Company.
- 10.13(7) Further Amended and Restated Revolving Credit Agreement dated as of February 15, 1996 among Aspen Technology, Inc., Prosys Modeling Investment Corporation, Industrial Systems, Inc., Dynamic Matrix Control Corporation and Setpoint, Inc., as the Borrowers, the Lenders Parties thereto, and Fleet Bank of Massachusetts, N.A., as Agent and Lender, together with related forms of the following (each in the form executed by each of such Borrowers):
  - (a) Amended and Restated Revolving Credit Note.
  - (b) Patent Conditional Assignment and Security Agreement.
  - (c) Trademark Collateral Security Agreement.
  - (d) Security Agreement.
- 10.14(14) Credit Agreement between Fleet National Bank and Aspen Technology, Inc. dated October 27, 2000.
- 10.15(10) Letter dated September 21, 1999, from Fleet National Bank to Aspen Technology, Inc. and Deposit Pledge Agreement dated as of October 18, 1999 between Fleet National Bank and Aspen Technology, Inc. further amending the Revolving Credit Agreement.
- 10.16(16) Registration Rights Agreement dated June 1, 2000 between Aspen Technology, Inc. and the former stockholders of Petrolsoft Corporation.
- 10.17(10) Registration Rights Agreement dated August 29, 2000 between Aspen Technology, Inc. and the former stockholders of ICARUS Corporation and ICARUS Services Limited.
- 10.18(15) Registration Rights Agreement dated June 15, 2001 between Aspen Technology, Inc. and Michael B. Feldman.
- 10.19(15) Registration Rights Agreement dated June 15, 2001 between Aspen Technology, Inc. and the former stockholders of Computer Processes Unlimited, L.L.C.
- 10.20(4) 1988 Non-Qualified Stock Option Plan, as amended.
- 10.21(5) 1995 Stock Option Plan.
- 10.22(5) 1995 Directors Stock Option Plan.
- 10.23(5) 1995 Employees' Stock Purchase Plan.
- 10.24(9) 1998 Employees' Stock Purchase Plan.
- 10.25(12) Amendment to 1998 Employees' Stock Purchase Plan.
- 10.26(8) 1996 Special Stock Option Plan.
- 10.27(12) 2001 Stock Option Plan.
- 10.28(13) Petrolsoft Corporation Stock Option Plan.
- 10.29(4) Form of Employee Confidentiality and Non-Competition Agreement.
- 10.30(4) Noncompetition, Confidentiality and Proprietary Rights Agreement between Aspen Technology, Inc. and Lawrence B. Evans.



- 10.31(8) Change in Control Agreement between Aspen Technology, Inc. and Lawrence B. Evans dated August 12, 1997.
- 10.32(8) Change in Control Agreement between Aspen Technology, Inc. and David McQuillin dated August 12, 1997.
- 10.33(10) Change in Control Agreement between Aspen Technology, Inc. and Helen Moye dated September 1, 2000.
- 10.34(10) Change in Control Agreement between Aspen Technology, Inc. and Michael Muscatello dated August 1, 2000.
- 10.35(8) Change in Control Agreement between Aspen Technology, Inc. and Mary A. Palermo dated August 12, 1997.
- 10.36(11) Change in Control Agreement between Aspen Technology, Inc. and Lisa W. Zappala dated November 3, 1998.
- 10.37(10) Financing Partner Agreement between Aspen Technology, Inc. and IBM Credit Corporation dated June 15, 2000.
- 10.38 Rider No. 2, dated September 4, 2001, to Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 21.1 Subsidiaries of Aspen Technology, Inc.
- 23.1 Consent of Arthur Andersen LLP.
- 24.1 Power of Attorney (included in signature page to Form 10-K).

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- 1. Previously filed as an exhibit to the Current Report on Form 8-K of Aspen Technology, Inc. dated March 12, 1998 (filed on March 27, 1998), and incorporated herein by reference.
  - 2. Previously filed as an exhibit to the Registration Statement on Form 8-A of Aspen Technology, Inc., as amended by Amendment No. 1 thereto (filed on June 12, 1998), and incorporated herein by reference.
  - 3. Previously filed as an exhibit to the Current Report on Form 8-K of Aspen Technology, Inc. dated June 17, 1998 (filed on June 19, 1998), and incorporated herein by reference.
  - 4. Previously filed as an exhibit to the Registration Statement on Form S-1 of Aspen Technology, Inc. (Registration No. 33-83916) (filed on September 13, 1994), and incorporated herein by reference.
  - 5. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-11651) (filed on September 9, 1996), and incorporated herein by reference.
  - 6. Previously filed as an exhibit to the Registration Statement on Form S-1 of Aspen Technology, Inc. (Registration No. 33-88734) (filed on January 29, 1995), and incorporated herein by reference.
  - 7. Previously filed as an exhibit to the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 1996, and incorporated herein by reference.
  - 8. Previously filed as an exhibit to the Annual Report on Form 10-K for the fiscal year ended June 30, 1997, and incorporated herein by reference.
  - 9. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-44575) (filed on January 20, 1998), and incorporated herein by reference.
  - 10. Previously filed as an exhibit to the Annual Report on Form 10-K for the fiscal year ended June 30, 2000, and incorporated herein by reference.
  - 11. Previously filed as an exhibit to the Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1998, and incorporated herein by reference.
  - 12. Previously filed as an exhibit to the Definitive Proxy Statement on Schedule 14A of Aspen Technology, Inc. filed November 13, 2000, and incorporated herein by reference.
  - 13. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-42536) (filed on July 28, 2000), and incorporated herein by reference.
  - 14. Previously filed as exhibit 10.3 to the Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2000, and incorporated herein by reference.

15. Previously filed as an exhibit to the Registration Statement on Form S-3 of Aspen Technology, Inc. (Registration No. 333-63208) (filed on June 15, 2001), and incorporated herein by reference.
16. Previously filed as an exhibit to the Registration Statement on Form S-3 of Aspen Technology, Inc. (Registration No. 333-47694) (filed on October 10, 2000), and incorporated herein by reference.

† Confidential treatment requested as to certain portions.

**(b) Reports on Form 8-K**

On April 24, 2001, we filed a Current Report on Form 8-K with respect to our press release announcing financial results for the quarter ended March 31, 2001.

On May 8, 2001, we filed a Current Report on Form 8-K with respect to a decision of our board of directors not to rescind our stockholder protection rights plan, which was previously approved by the board, and not to redeem the rights issued to our stockholders pursuant to the plan, and to have the plan remain in effect.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, as of September 26, 2001.

ASPEN TECHNOLOGY, INC.

By: /s/ LAWRENCE B. EVANS  
Lawrence B. Evans  
*Chairman of the Board,  
President and Chief Executive Officer*

## POWER OF ATTORNEY

We, the undersigned officers and directors of Aspen Technology, Inc., hereby severally constitute and appoint Lawrence B. Evans, Lisa W. Zappala and Michael J. Muscatello, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the Annual Report on Form 10-K filed herewith and any and all amendments to said Annual Report and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Aspen Technology, Inc. to comply with the provisions of the Securities Exchange Act of 1934 and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said Annual Report and any and all amendments thereto.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated as of September 26, 2001.

<u>Signature</u>	<u>Title</u>
<u>/s/ LAWRENCE B. EVANS</u> Lawrence B. Evans	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
<u>/s/ LISA W. ZAPPALA</u> Lisa W. Zappala	Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ JOSEPH F. BOSTON</u> Joseph F. Boston	Director
<u>/s/ GRESHAM T. BREBACH, JR.</u> Gresham T. Brebach, Jr.	Director
<u>/s/ DOUGLAS R. BROWN</u> Douglas R. Brown	Director
<u>Stephen L. Brown</u>	Director

Signature

/s/ STEPHEN M. JENNINGS

---

Stephen M. Jennings

Title

Director

/s/ JOAN C. MCARDLE

---

Joan C. McArdle

Director

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

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## **REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS**

To Aspen Technology, Inc.:

We have audited the accompanying consolidated balance sheets of Aspen Technology, Inc. (a Delaware corporation) and subsidiaries as of June 30, 2000 and 2001, and the related consolidated statements of operations, stockholders' equity and comprehensive income (loss) and cash flows for each of the three years in the period ended June 30, 2001. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Aspen Technology, Inc. and subsidiaries as of June 30, 2000 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 2001 in conformity with accounting principles generally accepted in the United States.

ARTHUR ANDERSEN LLP

BOSTON, MASSACHUSETTS  
AUGUST 3, 2001



**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except share data)

	June 30,	
	2000	2001
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 49,371	\$ 36,633
Short-term investments	64,161	31,005
Accounts receivable, net of reserves of \$1,439 in 2000 and \$1,905 in 2001	81,781	86,737
Unbilled services	21,894	29,652
Current portion of long-term installments receivable, net of unamortized discount of \$1,475 in 2000 and \$1,752 in 2001	24,873	31,094
Deferred tax asset	3,300	3,252
Prepaid expenses and other current assets	16,175	17,591
Total current assets	<u>261,555</u>	<u>235,964</u>
Long-term installments receivable, net of unamortized discount of \$5,831 in 2000 and \$8,437 in 2001	<u>28,301</u>	<u>43,428</u>
Property and leasehold improvements, at cost:		
Land	727	—
Building and improvements	6,200	4,639
Computer equipment	39,225	45,465
Purchased software	27,580	38,498
Furniture and fixtures	13,225	16,090
Leasehold improvements	5,386	8,243
	<u>92,343</u>	<u>112,935</u>
Less — Accumulated depreciation and amortization	<u>56,250</u>	<u>69,659</u>
	<u>36,093</u>	<u>43,276</u>
Computer software development costs, net of accumulated amortization of \$12,031 in 2000 and \$16,091 in 2001	<u>7,026</u>	<u>8,539</u>
Intangible assets, net of accumulated amortization of \$10,539 in 2000 and \$16,659 in 2001	<u>8,856</u>	<u>43,964</u>
Deferred tax asset	<u>10,130</u>	<u>15,686</u>
Other assets	<u>12,984</u>	<u>15,737</u>
	<u>\$364,945</u>	<u>\$406,594</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of long-term obligations	\$ 1,327	\$ 2,539
Accounts payable	8,748	7,114
Accrued expenses	44,644	55,845
Unearned revenue	13,903	18,711
Deferred revenue	23,553	24,341
Total current liabilities	<u>92,175</u>	<u>108,550</u>
Long-term obligations, less current portion	<u>1,923</u>	<u>1,899</u>
5 1/4% Convertible subordinated debentures	<u>86,250</u>	<u>86,250</u>
Deferred revenue, less current portion	<u>14,374</u>	<u>8,190</u>
Other liabilities	<u>1,025</u>	<u>635</u>
Commitments and contingencies (Notes 11, 12, 13 and 15)		
Stockholders' equity:		
Common stock, \$.10 par value —		
Authorized — 40,000,000 shares		
Issued — 29,060,428 shares in 2000 and 31,576,924 shares in 2001	2,906	3,157
Additional paid-in capital	173,591	228,976
Accumulated deficit	(3,752)	(24,127)
Deferred compensation	—	(1,400)
Notes receivable from stockholders	—	(283)
Treasury stock, at cost — 230,430 shares of common stock	(502)	(502)
Accumulated other comprehensive income (loss)	(3,045)	(4,751)
Total stockholders' equity	<u>169,198</u>	<u>201,070</u>
	<u>\$364,945</u>	<u>\$406,594</u>

The accompanying notes are an integral part of these consolidated financial statements.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In thousands, except per share data)

	Years Ended June 30,		
	1999	2000	2001
Revenues:			
Software licenses .....	\$ 97,108	\$132,843	\$147,448
Service and other .....	<u>129,411</u>	<u>135,250</u>	<u>163,176</u>
	<u>226,519</u>	<u>268,093</u>	<u>310,624</u>
Expenses:			
Cost of software licenses .....	7,899	9,605	11,856
Cost of service and other .....	83,905	85,193	98,295
Selling and marketing .....	85,664	91,863	113,608
Research and development .....	48,625	51,567	68,913
General and administrative .....	23,503	24,736	30,643
Costs related to acquisitions .....	—	1,547	—
Restructuring and other charges .....	17,867	—	6,969
Charge for in-process research and development .....	<u>—</u>	<u>—</u>	<u>9,915</u>
	<u>267,463</u>	<u>264,511</u>	<u>340,199</u>
Income (loss) from operations .....	(40,944)	3,582	(29,575)
Interest income .....	10,092	9,847	10,268
Interest expense .....	(5,677)	(5,563)	(5,469)
Write-off of Investment .....	—	—	(5,000)
Foreign currency exchange loss .....	(94)	(118)	(81)
Income on equity in joint ventures and realized gain on sale of investment .....	<u>19</u>	<u>4</u>	<u>750</u>
Income (loss) before provision for (benefit from) income taxes ....	(36,604)	7,752	(29,107)
Provision for (benefit from) income taxes .....	<u>(15,809)</u>	<u>2,324</u>	<u>(8,732)</u>
Net income (loss) .....	<u><u>\$ (20,795)</u></u>	<u><u>\$ 5,428</u></u>	<u><u>\$ (20,375)</u></u>
Pro forma net income (loss), reflecting provision for income taxes on Subchapter S-Corporation income (unaudited) .....	<u><u>\$ (22,066)</u></u>	<u><u>\$ 5,428</u></u>	
Net income (loss) per share:			
Diluted .....	<u><u>\$ (0.76)</u></u>	<u><u>\$ 0.18</u></u>	<u><u>\$ (0.68)</u></u>
Basic .....	<u><u>\$ (0.76)</u></u>	<u><u>\$ 0.19</u></u>	<u><u>\$ (0.68)</u></u>
Pro forma diluted (unaudited) .....	<u><u>\$ (0.80)</u></u>	<u><u>\$ 0.18</u></u>	
Weighted average shares outstanding:			
Diluted .....	<u><u>27,476</u></u>	<u><u>30,785</u></u>	<u><u>29,941</u></u>
Basic .....	<u><u>27,476</u></u>	<u><u>28,221</u></u>	<u><u>29,941</u></u>

The accompanying notes are an integral part of these consolidated financial statements.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS)**  
(In thousands, except share data)

	Common Stock		Additional Paid-in Capital		Retained Earnings (Accumulated Deficit)	Deferred Compensation	Notes Receivable From Stockholders	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Stockholders' Equity	Total Comprehensive Income (Loss)
	Number of Shares	\$.10 Par Value							Number of Shares	Cost	
<b>Balance, June 30, 1998</b>	27,370,842	\$2,737	\$148,081	443	\$ 16,460	\$ —	\$ —	\$ (219)	230,330	\$(502)	\$166,557
Issuance of common stock in an immaterial pooling purchase plans	45,000	5	—	—	(444)	—	—	—	—	—	4
Exercise of common stock under employee stock purchase plans	267,324	27	4,371	—	—	—	—	—	—	—	4,398
Exercise of stock options and warrants	123,986	12	901	—	—	—	—	—	100	—	913
Purchase of treasury stock	—	—	—	—	(3,957)	—	—	—	—	—	(3,957)
Dividends paid	—	—	—	—	—	—	—	(1,574)	—	—	(1,574)
Translation adjustment, not tax effected	—	—	—	—	—	—	—	—	—	—	—
Unrealized market loss on investments, net of \$135 tax effect	—	—	—	—	—	—	—	(219)	—	—	(219)
Tax benefit related to stock options	—	—	423	—	—	—	—	—	—	—	423
Net loss	—	—	—	—	(20,795)	—	—	—	—	—	(20,795)
Comprehensive net loss for the year ended June 30, 1999	—	—	—	—	—	—	—	—	—	—	—
<b>Balance, June 30, 1999</b>	27,807,152	2,781	154,219	—	(8,736)	—	—	(2,012)	230,430	(502)	145,750
Issuance of common stock under employee stock purchase plans	384,864	38	3,822	—	—	—	—	—	—	—	3,860
Exercise of stock options	868,412	87	7,773	—	(444)	—	—	—	—	—	7,860
Dividends paid	—	—	—	—	—	—	—	—	—	—	(444)
Translation adjustment, not tax effected	—	—	—	—	—	—	—	(904)	—	—	(904)
Unrealized market loss on investments, net of \$90 tax effect	—	—	—	—	—	—	—	(129)	—	—	(129)
Tax benefit related to stock options	—	—	7,777	—	—	—	—	—	—	—	7,777
Net income	—	—	—	—	5,428	—	—	—	—	—	5,428
Comprehensive net income for the year ended June 30, 2000	—	—	—	—	—	—	—	—	—	—	—
<b>Balance, June 30, 2000</b>	29,060,428	2,906	173,591	—	(3,752)	—	—	(3,045)	230,430	(502)	169,198
Issuance of stock in the purchase of businesses and equity investment	1,255,782	126	37,151	—	—	—	—	—	—	—	37,277
Issuance of common stock under employee stock purchase plans	174,463	17	4,693	—	—	—	—	—	—	—	4,710
Exercise of stock options and warrants	991,751	99	11,802	—	—	—	—	—	—	—	11,901
Translation adjustment, not tax effected	—	—	—	—	—	—	—	(2,434)	—	—	(2,434)
Unrealized market gain on investments, net of \$218 tax effect	—	—	—	—	—	—	—	728	—	—	728
Issuance of restricted common stock	94,500	9	1,739	—	—	(1,465)	(283)	—	—	—	—
Amortization of deferred compensation	—	—	—	—	—	65	—	—	—	—	65
Net Loss	—	—	—	—	(20,375)	—	—	—	—	—	(20,375)
Comprehensive net loss for the year ended June 30, 2001	—	—	—	—	—	—	—	—	—	—	—
<b>Balance, June 30, 2001</b>	31,576,924	\$3,157	\$228,976	—	\$(24,127)	\$(1,400)	\$(283)	\$(4,751)	230,430	\$(502)	\$201,070

The accompanying notes are an integral part of these consolidated financial statements.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Years Ended June 30,		
	1999	2000	2001
Cash flows from operating activities:			
Net income (loss) .....	\$(20,795)	\$ 5,428	\$(20,375)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities —			
Depreciation and amortization .....	18,336	16,327	24,099
Charge for in-process research and development .....	—	—	9,915
Write-off of Investment .....	—	—	5,000
Deferred stock-based compensation .....	—	—	65
Gain on sale of property .....	—	—	(257)
Deferred income taxes .....	(14,124)	(6,201)	(12,783)
Write-off of assets related to restructuring .....	3,060	—	1,159
Changes in assets and liabilities —			
Accounts receivable .....	(2,372)	(7,977)	(3,399)
Unbilled services .....	1,186	(5,625)	(7,277)
Prepaid expenses and other current assets .....	(2,061)	(4,119)	(417)
Long-term installments receivable .....	3,424	4,021	(8,845)
Accounts payable and accrued expenses .....	4,577	18,555	5,195
Unearned revenue .....	4,040	3,831	4,323
Deferred revenue .....	1,179	3,774	(9,786)
Net cash provided by (used in) operating activities .....	(3,550)	28,014	(13,383)
Cash flows from investing activities:			
Purchase of property and leasehold improvements .....	(7,688)	(9,682)	(20,350)
Proceeds on sale of property .....	—	—	2,438
Increase in computer software development costs .....	(2,966)	(4,082)	(5,573)
(Increase) decrease in other assets .....	323	(6,826)	(1,693)
(Increase) decrease in short-term investments .....	(29,845)	373	33,884
(Decrease) increase in other liabilities .....	(289)	400	(675)
Cash used in the purchase of businesses, net of cash acquired .....	(1,200)	(2,085)	(21,746)
Net cash used in investing activities .....	(41,665)	(21,902)	(13,715)
Cash flows from financing activities:			
Issuance of common stock under employee stock purchase plans .....	4,398	3,860	4,710
Exercise of stock options and warrants .....	913	7,860	11,901
Payments of long-term debt and capital lease obligations .....	(947)	(2,266)	(1,041)
Payment of dividends .....	(3,957)	(444)	—
Net cash provided by financing activities .....	407	9,010	15,570
Effect of exchange rate changes on cash and cash equivalents .....	(122)	210	(1,210)
Increase (decrease) in cash and cash equivalents .....	(44,930)	15,332	(12,738)
Cash and cash equivalents, beginning of period .....	78,969	34,039	49,371
Cash and cash equivalents, end of period .....	<u>\$ 34,039</u>	<u>\$ 49,371</u>	<u>\$ 36,633</u>
Supplemental disclosure of cash flow information:			
Cash paid for income taxes .....	<u>\$ 2,985</u>	<u>\$ 806</u>	<u>\$ 2,072</u>
Cash paid for interest .....	<u>\$ 4,709</u>	<u>\$ 4,972</u>	<u>\$ 5,023</u>
Supplemental disclosure of cash flows related to acquisitions:			
The Company acquired certain companies as described in Note 4. These acquisitions are summarized as follows:			
Fair value of assets acquired, excluding cash .....	\$ 1,290	\$ 2,360	\$ 60,379
Payments in connection with the acquisitions, net of cash acquired .....	(1,200)	(2,085)	(21,746)
Value of stock issued in connection with the acquisitions .....	—	—	(31,555)
Charge for in-process research and development .....	—	—	9,915
Liabilities assumed .....	<u>\$ 90</u>	<u>\$ 275</u>	<u>\$ 16,993</u>

During the fiscal year 1999, the Company acquired Syllogistics, Inc. which was accounted for as a pooling-of-interests. Due to its immateriality to the financial position and results of operations of the Company, the historical financial statements were not restated.

The accompanying notes are an integral part of these consolidated financial statements.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(1) Operations**

Aspen Technology, Inc. and its subsidiaries (the Company) provide integrated software and services to the process industries. The process industries include manufacturers of chemicals, petrochemicals, petroleum products, pharmaceuticals, pulp and paper, electric power, food and beverages, consumer products, and metals and minerals. The Company's solutions consist of a comprehensive set of software and consulting services that supports its customers' collaborative engineering, manufacturing, supply chain and e-business strategies, and enables its customers to identify and take advantage of profit opportunities. These solutions improve a variety of business activities, including streamlining raw material procurement, optimizing production, reducing the cost of delivering finished products to customers and increasing returns from plant assets. Through these solutions customers are enabled to improve their competitiveness and profitability by increasing revenues, reducing operating costs, reducing working capital requirements and decreasing capital expenditures. In addition to its broad range of software solutions, the Company offers system implementation, advanced process control, real-time optimization and other consulting services through its staff of project engineers. The Company has operations and customers worldwide.

**(2) Significant Accounting Policies**

***(a) Principles of Consolidation***

The accompanying consolidated financial statements include the results of operations of the Company and its wholly owned subsidiaries. All material intercompany balances and transactions have been eliminated in consolidation.

***(b) Cash and Cash Equivalents***

Cash and cash equivalents are stated at cost, which approximates market, and consist of short-term, highly liquid investments with original maturities of less than three months.

***(c) Short-Term Investments***

Securities purchased to be held for indefinite periods of time, and not intended at the time of purchase to be held until maturity, are classified as available-for-sale securities. Securities classified as available-for-sale are included in short-term investments and cash and cash equivalents and are recorded at market value in the accompanying consolidated financial statements. Unrealized gains and losses have been accounted for as a separate component of consolidated stockholders' equity and comprehensive income (loss). Realized investment gains and losses were not material in fiscal 1999, 2000 or 2001.

In the fourth quarter of fiscal 2001 a \$2.0 million investment in Extricity Software, Inc. (Extricity) was converted into a marketable security when Extricity was purchased by Peregrine Systems (see Note 15).

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Available-for-sale investments as of June 30, 2000 and 2001 are as follows (in thousands):

Description	Contracted Maturity	June 30, 2000		June 30, 2001	
		Total Market Value	Total Amortized Cost	Total Market Value	Total Amortized Cost
Cash and cash equivalents:					
Cash and cash equivalents . . . . .	N/A	\$ 20,730	\$ 20,730	\$25,599	\$25,599
Commercial paper . . . . .	0-3 months	18,929	18,929	—	—
Money market funds . . . . .	0-3 months	9,712	9,712	11,034	11,034
Total cash and cash equivalents . . . . .		49,371	49,371	36,633	36,633
Short-term investments:					
Mutual funds . . . . .	N/A	250	250	—	—
Marketable securities . . . . .	N/A	—	—	211	211
Certificates of deposit . . . . .	4-11 months	7,000	6,998	—	—
Corporate and foreign bonds . . . . .	4-12 months	6,344	6,356	6,020	6,011
Corporate and foreign bonds . . . . .	1-5 years	50,567	50,961	24,774	24,457
Total short term investments . . . . .		64,161	64,565	31,005	30,679
		\$113,532	\$113,936	\$67,638	\$67,312

***(d) Derivative Instruments and Hedging***

Effective July 1, 2000, the Company adopted Statement of Financial Accounting Standards (SFAS), No. 133 "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 133, as amended by SFAS No. 138, requires that all derivatives, including foreign currency exchange contracts, be recognized on the balance sheet at fair value. Derivatives that are not hedges must be adjusted to fair value through earnings. If a derivative is a hedge, depending on the nature of the hedge, changes in the fair value of the derivative are either offset against the change in fair value of assets, liabilities or firm commitments through earnings or recognized in other comprehensive income until the hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value is to be immediately recognized in earnings. The adoption of SFAS No. 133 resulted in an immaterial cumulative effect on income and other comprehensive income for the Company.

Forward foreign exchange contracts are used primarily by the Company to hedge certain balance sheet exposures resulting from changes in foreign currency exchange rates. Such exposures primarily result from portions of the Company's installment receivables that are denominated in currencies other than the U.S. dollar, primarily the Japanese Yen and certain European currencies. These foreign exchange contracts are entered into to hedge recorded installments receivable made in the normal course of business, and accordingly, are not speculative in nature. As part of its overall strategy to manage the level of exposure to the risk of foreign currency exchange rate fluctuations, the Company hedges the majority of its installments receivable denominated in foreign currencies.

At June 30, 2001, the Company had effectively hedged \$9.4 million of installments receivable and accounts receivable denominated in foreign currency. The Company does not hold or transact in financial instruments for purposes other than risk management. The carrying value of the long-term installments receivable that were denominated in foreign currency was \$5.0 million and \$4.7 million at June 30, 2000 and 2001, respectively. The June 2001 installments receivable mature through June 2005. There have been no material gains or losses recorded relating to hedge contracts for the periods presented.



**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The Company records its foreign currency exchange contracts at fair value in its consolidated balance sheet and the related gains or losses on these hedge contracts are recognized in earnings. Gains and losses resulting from the impact of currency exchange rate movements on forward foreign exchange contracts are designated to offset certain accounts receivable and are recognized as other income or expense in the period in which the exchange rates change and offset the foreign currency losses and gains on the underlying exposures being hedged. During fiscal 2001 net gain recognized in the consolidated statement of operations was \$39,000. A small portion of the forward foreign currency exchange contract is designated to hedge the future interest income of the related receivables. The ineffective portion of a derivative's change in fair value is recognized currently through earnings regardless of whether the instrument is designated as a hedge. The gains and losses resulting from the impact of currency rate movements on forward currency exchange contracts are recognized in other comprehensive income for this portion of the hedge. During fiscal 2001, net gain deferred in other comprehensive income was \$3,000.

The following table provides information about the Company's foreign currency derivative financial instruments outstanding as of June 30, 2001. The information is provided in U.S. dollar amounts, as presented in the Company's consolidated condensed financial statements. The table presents the notional amount (at contract exchange rates) and the weighted average contractual foreign currency rates:

<u>Currency</u>	<u>Notional Amount (in thousands)</u>	<u>Average Contract Rate</u>
British Pound Sterling . . . . .	\$3,435	1.48
Japanese Yen . . . . .	3,349	108.62
Euro . . . . .	625	0.89
Swiss Franc . . . . .	611	1.64
Thailand Bhat . . . . .	475	43.20
German Deutsche Mark . . . . .	447	2.12
French Franc . . . . .	424	7.10
Netherland Guilder . . . . .	28	2.40
Total . . . . .	<u>\$9,394</u>	
Estimated Fair Value . . . . .	<u>\$8,643*</u>	

Payments on the above receivables due during fiscal 2002 equal \$5.9 million.

\* The estimated fair value is based on the estimated amount at which the contracts could be settled based on the spot rates as of June 30, 2001. The market risk associated with these instruments resulting from currency exchange rate movements is expected to offset the market risk of the underlying installments being hedged. The credit risk is that the Company's banking counterparties may be unable to meet the terms of the agreements. The Company minimizes such risk by limiting its counterparties to major financial institutions. In addition, the potential risk of loss with any one party resulting from this type of credit risk is monitored. Management does not expect any loss as a result of default by other parties. However, there can be no assurances that the Company will be able to mitigate market and credit risks described above.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

***(e) Depreciation and Amortization***

The Company provides for depreciation and amortization, computed using the straight-line and declining balance methods, by charges to operations in amounts estimated to allocate the cost of the assets over their estimated useful lives, as follows:

<u>Asset Classification</u>	<u>Estimated Useful Life</u>
Building and improvements .....	7-30 years
Computer equipment .....	3-5 years
Purchased software .....	3 years
Furniture and fixtures .....	3-10 years
Leasehold improvements .....	Life of lease

***(f) Revenue Recognition***

The Company recognizes revenue in accordance with Statement of Position (SOP) No. 97-2, "Software Revenue Recognition," as amended and interpreted. License revenue, including license renewals, consists principally of revenue earned under fixed-term and perpetual software license agreements and is generally recognized upon shipment of the software if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence (VSOE) exists for all undelivered elements. The Company determines VSOE based upon the price charged when the same element is sold separately. Maintenance and support VSOE represents a consistent percentage of the license fees charged to customers. Consulting services VSOE represents standard rates, which the Company charges its customers when they sell their consulting services separately. For an element not yet being sold separately, VSOE represents the price established by management having the relevant authority when it is probable that the price, once established, will not change before the separate introduction of the element into the marketplace. Revenue under license arrangements, which may include several different software products and services sold together, are allocated to each element based on the residual method in accordance with SOP 98-9, "Software Revenue Recognition, with Respect to Certain Transactions." Under the residual method, the fair value of the undelivered elements is deferred and subsequently recognized when earned. The Company has established sufficient VSOE for professional services, training and maintenance and support services. Accordingly, software license revenue is recognized under the residual method in arrangements in which software is licensed with professional services, training and maintenance and support services. The Company uses installment contracts as a standard business practice and has a history of successfully collecting under the original payment terms without making concessions on payments, products or services.

Maintenance and support services are recognized ratably over the life of the maintenance and support contract period. Maintenance and support services include only unspecified rights to product upgrades and enhancements. These services are typically sold for a one-year term and are sold either as part of a multiple element arrangement with software licenses or are sold independently at time of renewal. The Company does not provide specified upgrades to its customers in connection with the licensing of its software products.

Service revenues from fixed-price contracts are recognized using the percentage-of-completion method, measured by the percentage of costs (primarily labor) incurred to date as compared to the estimated total costs (primarily labor) for each contract. When a loss is anticipated on a contract, the full amount thereof is provided currently. Service revenues from time and expense contracts and consulting and training revenue are recognized as the related services are performed. Services that have been performed but for which billings have not been made are recorded as unbilled services, and billings that have been recorded before the services have been performed are recorded as unearned revenue in the accompanying consolidated balance sheets.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Installments receivable represent the present value of future payments related to the financing of noncancellable term and perpetual license agreements that provide for payment in installments, generally over a one- to five-year period. A portion of each installment agreement is recognized as interest income in the accompanying consolidated statements of operations. The interest rates utilized for the years ended June 30, 1999, 2000, and 2001 ranged from 8.5% to 9.0%.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin (SAB) No. 101, "Revenue Recognition in Financial Statements." SAB 101 provides guidance on the recognition, disclosure and presentation of revenue in financial statements. The adoption of SAB 101 by the Company in the fourth quarter of the fiscal year ended June 30, 2001 did not have a material impact on the Company's financial position, results of operations, or cash flows.

***(g) Computer Software Development Costs***

Certain computer software development costs are capitalized in the accompanying consolidated balance sheets. Capitalization of computer software development costs begins upon the establishment of technological feasibility. In accordance with SFAS No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased, or otherwise Marketed", the Company defines the establishment of technological feasibility as the development of a working model. Amortization of capitalized computer software development costs is provided on a product-by-product basis using the straight-line method, beginning upon commercial release of the product, and continuing over the remaining estimated economic life of the product, not to exceed three years. Total amortization expense charged to operations was approximately \$2,653,000, \$3,064,000, and \$4,060,000 in fiscal 1999, 2000 and 2001, respectively.

***(h) Foreign Currency Translation***

The financial statements of the Company's foreign subsidiaries are translated in accordance with SFAS No. 52, "Foreign Currency Translation". The determination of functional currency is based on the subsidiaries' relative financial and operational independence from the Company. Foreign currency exchange gains or losses for certain wholly owned subsidiaries are credited or charged to the accompanying consolidated statements of operations since the functional currency of the subsidiaries is the U.S. dollar. Gains and losses from foreign currency translation related to entities whose functional currency is their local currency are credited or charged to the cumulative translation adjustment account, included in stockholders' equity in the accompanying consolidated balance sheets. Effective January 1, 1999, the functional currency of several foreign subsidiaries was changed from the U.S. dollar to the respective foreign currency. This change was made as significant changes in economic facts and circumstances related to the Company's operations in those foreign countries occurred.

***(i) Net Income (Loss) per Share***

Basic earnings per share was determined by dividing net income (loss) by the weighted average common shares outstanding during the period. Diluted earnings per share was determined by dividing net income (loss) by diluted weighted average shares outstanding. Diluted weighted average shares reflects the dilutive effect, if any, of common equivalent shares. Common equivalent shares include common stock options and warrants to the extent their effect is dilutive, based on the treasury stock method. Proforma basic and diluted net income (loss) per share assumes earnings from Petrolsoft, an acquired Subchapter S-Corporation accounted for as a pooling of interests, were taxed at the Company's effective tax rate. The calculations of

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

basic, diluted and proforma diluted net income (loss) per share and basic and diluted weighted average shares outstanding are as follows (in thousands, except per share data):

	<u>Years Ended June 30,</u>		
	<u>1999</u>	<u>2000</u>	<u>2001</u>
Net income (loss) .....	\$(20,795)	\$ 5,428	\$(20,375)
Pro forma provision for income taxes on Subchapter S-Corporation income (unaudited) .....	1,271	—	—
Pro forma net income (loss) (unaudited) .....	<u>\$(22,066)</u>	<u>\$ 5,428</u>	<u>\$(20,375)</u>
Basic weighted average common shares outstanding .....	27,476	28,221	29,941
Weighted average common share equivalents .....	—	2,564	—
Diluted weighted average shares outstanding .....	<u>27,476</u>	<u>30,785</u>	<u>29,941</u>
Basic net income (loss) per share .....	<u>\$ (0.76)</u>	<u>\$ 0.19</u>	<u>\$ (0.68)</u>
Diluted net income (loss) per share .....	<u>\$ (0.76)</u>	<u>\$ 0.18</u>	<u>\$ (0.68)</u>
Proforma diluted net income (loss) per share (unaudited) .....	<u>\$ (0.80)</u>	<u>\$ 0.18</u>	

The following dilutive effect of potential common shares was excluded from the calculation of dilutive weighted average shares outstanding as their effect would be anti-dilutive (in thousands):

	<u>Years Ended June 30,</u>		
	<u>1999</u>	<u>2000</u>	<u>2001</u>
Convertible debt .....	1,628	1,628	1,628
Options and warrants .....	994	—	2,897
Total .....	<u>2,622</u>	<u>1,628</u>	<u>4,525</u>

***(j) Management Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

***(k) Concentration of Credit Risk***

Financial instruments that potentially subject the Company to concentrations of credit risk are principally cash and cash equivalents, investments, accounts receivable and installments receivable. The Company places its cash and cash equivalents and investments in highly rated institutions. Concentration of credit risk with respect to receivables is limited to certain customers (end users and distributors) to which the Company makes substantial sales. To reduce risk, the Company routinely assesses the financial strength of its customers, hedges specific foreign receivables and routinely sells its receivables to financial institutions with limited recourse and without recourse. As a result, the Company believes that the accounts and installments receivable credit risk exposure is limited. The Company maintains an allowance for potential credit losses but historically has not experienced any significant losses related to individual customers or groups of customers in any particular industry or geographic area. As of June 30, 2000 and 2001, the Company had no customers that represented 10% of total accounts receivable.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

***(l) Financial Instruments***

Financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, installments receivable and foreign exchange contracts. The estimated fair value of these financial instruments approximates their carrying value and, except for accounts receivable and installments receivable, is based primarily on market quotes.

***(m) Intangible Assets and Impairment of Long-Lived Assets***

Intangible assets consist of the following at June 30, 2000 and 2001 (in thousands):

	<u>Estimated Useful Life</u>	<u>June 30, 2000</u>	<u>June 30, 2001</u>
Acquired technology .....	3-5 years	\$ 8,401	\$28,126
Goodwill .....	10 years	6,446	26,369
Acquired assembled workforce .....	5-7 years	2,748	4,328
Other intangible assets .....	5-12 years	<u>1,800</u>	<u>1,800</u>
		19,395	60,623
Less-Accumulated amortization .....		<u>10,539</u>	<u>16,659</u>
		<u>\$ 8,856</u>	<u>\$43,964</u>

The Company evaluates its long-lived assets, which include property and leasehold improvements and intangible assets for impairment as events and circumstances indicate that the carrying amount may not be recoverable and at a minimum at each balance sheet date. The Company evaluates the realizability of its long-lived assets based on profitability and undiscounted cash flow expectations for the related asset or subsidiary. Management believes that as of each of the balance sheet dates presented none of the Company's long-lived assets were impaired. See Note 3 for discussion regarding restructuring and other charges.

In June 2001, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets." This statement supercedes Accounting Principles Board Opinion No. 17 ("APB 17"), "Intangible Assets," and applies to goodwill and intangible assets acquired after June 30, 2001, as well as goodwill and intangible assets previously acquired. Under this statement goodwill as well as certain other intangible assets, determined to have an indefinite life, will no longer be amortized, instead these assets will be reviewed for impairment on a periodic basis. Early adoption of this statement is permitted for non-calendar year-end companies whereby the entity's fiscal year begins after March 15, 2001 and its first interim period financial statements have not been issued. Pursuant to this statement, the Company elected early adoption effective July 1, 2001. The goodwill and acquired assembled workforce associated with past acquisitions is no longer subject to amortization over its estimated useful life. Such intangible assets will be subject to an annual assessment for impairment by applying a fair-value based test. The Company is currently assessing these assets for impairment, and has not yet determined whether or the extent to which they will affect the financial statements.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The proforma effect on prior year earnings of excluding goodwill and acquired assembled workforce amortization expense, net of tax, is as follows:

	<u>1999</u>	<u>2000</u>	<u>2001</u>
Reported net income (loss) .....	\$(20,795)	\$5,428	\$(20,375)
Add back: Goodwill and acquired assembled workforce amortization .....	<u>740</u>	<u>727</u>	<u>1,840</u>
Adjusted net income (loss) .....	<u><u>\$(20,055)</u></u>	<u><u>\$6,155</u></u>	<u><u>\$(18,535)</u></u>
Basic income per common share			
Reported net income (loss) .....	\$ (0.76)	\$ 0.19	\$ (0.68)
Goodwill and acquired assembled workforce amortization .....	<u>0.03</u>	<u>0.03</u>	<u>0.06</u>
Adjusted net income (loss) .....	<u><u>\$ (0.73)</u></u>	<u><u>\$ 0.22</u></u>	<u><u>\$ (0.62)</u></u>
Income per common share assuming full dilution			
Reported net income (loss) .....	\$ (0.76)	\$ 0.18	\$ (0.68)
Goodwill and acquired assembled workforce amortization .....	<u>0.03</u>	<u>0.02</u>	<u>0.06</u>
Adjusted net income (loss) .....	<u><u>\$ (0.73)</u></u>	<u><u>\$ 0.20</u></u>	<u><u>\$ (0.62)</u></u>

***(n) Comprehensive Income (Loss)***

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Comprehensive income (loss) is disclosed in the accompanying consolidated statements of stockholders' equity and comprehensive income (loss). The components of accumulated other comprehensive income (loss) as of June 30, 1999, 2000 and 2001 are as follows (in thousands):

	<u>1999</u>	<u>2000</u>	<u>2001</u>
Unrealized gain (loss) on investments, net of taxes .....	\$ (275)	\$ (404)	\$ 324
Cumulative translation adjustment .....	<u>(1,737)</u>	<u>(2,641)</u>	<u>\$(5,075)</u>
Total accumulated other comprehensive income (loss)	<u><u>\$(2,012)</u></u>	<u><u>\$(3,045)</u></u>	<u><u>\$(4,751)</u></u>

***(o) Recently Issued Accounting Pronouncements***

In March 2000, the FASB issued Interpretation (FIN) No. 44, "Accounting for Certain Transactions Involving Stock Compensation – An Interpretation of APB Opinion No. 25." FIN 44 clarifies the definition of employees, the criteria for determining whether a plan qualifies as a non-compensatory plan, the accounting consequences of various modifications to the terms of a previously fixed stock option or award and the accounting for an exchange of stock compensation awards in a business combination. FIN 44 was effective July 1, 2000, but certain conclusions in the Interpretation cover specific events that occurred after either December 15, 1998 or January 12, 2000. The adoption of FIN 44 did not have a material effect on the Company's results of operations or financial position.

In June 2001, the FASB issued SFAS No. 141, "Business Combinations". SFAS 141 requires all business combinations initiated after June 30, 2001 to be accounted for using the purchase method. The Company does not expect the adoption of this statement to have a material impact on its operations.

**(3) Restructuring and Other Charges**

***(a) Q4 FY99***

In the fourth quarter of fiscal 1999, the Company experienced a significant slow down in certain of its businesses due to difficulties that customers in its core vertical markets of refining, chemicals and



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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

petrochemicals were experiencing. These markets were experiencing a significant decrease in pricing for their products, which significantly reduced their revenues and related cash inflows. In turn, these companies began to reduce their capital spending and lengthened the evaluation and decision-making cycle for purchases. The impact of this on the Company was dramatic, lowering license revenues for expected levels by a significant amount. Based on these reduced revenues, Company management made significant changes to the business plan, resulting in a restructuring plan. The restructuring plan resulted in a pre-tax restructuring charge totaling \$17.9 million. The restructuring and other charges are broken down as follows:

	<u>Closedown/ Consolidation of Facilities</u>	<u>Employee Severance, Benefits, and Related Costs</u>	<u>Write-off of Assets</u>	<u>Other</u>	<u>Total</u>
Restructuring and other charges . . . . .	\$10,224	\$4,324	\$3,060	\$259	\$17,867
Write-off of assets, and other . . . . .	5,440	—	3,060	101	8,601
Fiscal 1999 payments . . . . .	<u>24</u>	<u>2,386</u>	<u>—</u>	<u>57</u>	<u>2,467</u>
Accrued expenses, June 30, 1999 . . . . .	4,760	1,938	—	101	6,799
Fiscal 2000 payments . . . . .	<u>1,408</u>	<u>1,462</u>	<u>—</u>	<u>97</u>	<u>2,967</u>
Accrued expenses, June 30, 2000 . . . . .	3,352	476	—	4	3,832
Fiscal 2001 payments . . . . .	<u>1,484</u>	<u>126</u>	<u>—</u>	<u>—</u>	<u>1,610</u>
Accrued expenses, June 30, 2001 . . . . .	<u>\$ 1,868</u>	<u>\$ 350</u>	<u>\$ —</u>	<u>\$ 4</u>	<u>\$ 2,222</u>

*Close-down/consolidation of facilities:* Approximately \$10.2 million of the restructuring charge relates to the termination of facility leases and other lease-related costs. The facility leases had remaining terms ranging from one month to six years. The amount accrued reflects the Company's best estimate of actual costs to buy out the leases in certain cases or the net cost to sublease the properties in other cases. Included in this amount is the write-off of certain assets, primarily building and leasehold improvements and adjustments to certain obligations that relate to the closing of facilities.

*Employee severance, benefits and related costs:* Approximately \$4.3 million of the restructuring charge relates to the reduction in workforce. Approximately 200 employees, or 12% of the workforce, were eliminated as the Company rationalized its product and service offerings against customer needs in various markets.

*Write-off of assets:* Approximately \$3.1 million of the restructuring and other charge relates to the write-off of certain assets that had been determined to be of no further value to the Company as a direct consequence of the change in the business plans that have been made as a result of the restructuring. These business plan changes are the result of management's assessment and rationalization of certain non-core products and activities acquired in recent years. The write-off was based on management's assessment of the current fair value of certain assets, including intangible assets, and their resale value, if any.

**(b) Q4 FY01**

In the third quarter of fiscal 2001 the revenues realized by the Company were reduced from the Company's expectations as customers delayed spending in the widespread slowdown in information technology spending and the deferral of late-quarter purchasing decisions. Like many other software companies, the Company reduced its revenue expectations for the fourth quarter and for the fiscal year 2002 until revenue visibility and predictability improves. Based on these reduced revenue expectations Company management evaluated the business plan and made significant changes, resulting in a restructuring plan for the Company's operations. This restructuring plan included a reduction in headcount, a substantial decrease in discretionary

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

spending and a sharpening of the Company's e-business focus to emphasize its marketplace solutions, and resulted in a pre-tax restructuring charge totaling \$7.0 million. The restructuring charge is broken down as follows:

	<u>Closedown/ Consolidation of Facilities</u>	<u>Employee Severance, Benefits, and Related Costs</u>	<u>Write-off of Assets</u>	<u>Total</u>
Restructuring charge .....	\$2,774	\$3,148	\$1,047	\$6,969
Write-off of asset .....	—	—	1,047	1,047
Fiscal 2001 payments .....	<u>114</u>	<u>1,878</u>	<u>—</u>	<u>1,992</u>
Accrued expenses, June 30, 2001 .....	<u>\$2,660</u>	<u>\$1,270</u>	<u>\$ —</u>	<u>\$3,930</u>

*Close-down/consolidation of facilities:* Approximately \$2.8 million of the restructuring charge relates to the termination of facility leases and other lease-related costs. The facility leases had remaining terms ranging from one month to six years. The amount accrued reflects the Company's best estimate of the actual costs to buy out the leases in certain cases of the net cost to sublease the properties in other cases. Included in this amount is the write-off of certain assets, primarily leasehold improvements.

*Employee severance, benefits and related costs:* Approximately \$3.2 million of the restructuring charge relates to the reduction in workforce. Approximately 100 employees, or 5% of the workforce, were eliminated under the changes to the business plan implemented by Company management. Areas impacted included sales and marketing, services, general and administrative, and research and development. As of June 30, 2001, \$1.8 million of severance was paid.

*Write-off of assets:* Approximately \$1.0 million of the restructuring and other charges relates to the impairment of an investment in certain e-business initiatives that the Company will no longer support as a direct consequence of the change in business plan.

***(c) Subsequent Event – Q1 FY02***

During August 2001, in light of further economic uncertainties, Company management has made a decision to further reduce spending. This reduction primarily consists of a reduction in worldwide headcount of approximately 5% of the workforce. As a result of these measures, the Company expects to record a restructuring charge of approximately \$3.0 to 5.0 million in the quarter ending September 30, 2001.

**(4) Acquisitions**

***(a) Acquisitions During Fiscal Year 1999***

On September 14, 1998, the Company paid \$1.2 million in cash for certain assets and personnel of Callidus Technologies, Inc., a consulting firm that specializes in the modeling of predictive emissions monitoring. This acquisition has been accounted for as a purchase transaction. The purchase price has been allocated to various assets, primarily intangible assets, based on their fair values. On October 14, 1998, the Company issued 45,000 shares of its common stock for all the outstanding shares of Syllogistics, Inc., a provider of logistics management software. This acquisition was accounted for as pooling-of-interests. Pro forma information related to these acquisitions is not presented as it is not material.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

***(b) Acquisitions During Fiscal Year 2000***

On June 1, 2000, the Company acquired Petrolsoft Corporation and subsidiary (Petrolsoft), a supplier of web-enabled supply chain software for the downstream petroleum industry. The Company exchanged 2,641,101 shares of its common stock for all of the outstanding shares of Petrolsoft. The Company placed 132,054 of these shares into escrow as security for indemnification obligations of Petrolsoft relating to representation, warranties and other matters, as defined. This merger was accounted for as a pooling-of-interests. Accordingly, the consolidated financial statements of the Company have been restated to give retroactive effect to the combination of Petrolsoft. The Company incurred approximately \$1.5 million of expenses related to this acquisition, which were charged to operations in the quarter ending June 30, 2000. Prior to the acquisition, Petrolsoft was an S-Corporation and subject only to certain state franchise taxes. As such, unaudited pro forma net income (loss) and per share information has been provided as if Petrolsoft had been subject to the Company's effective income tax rates prior to the acquisition. The consolidated financial statements also reflect the historical Petrolsoft dividends that were distributed to the S-Corporation shareholders in accordance with Petrolsoft's historical policy in order to meet the shareholders' personal income tax obligations.

On June 8, 2000, the Company acquired M2R, SA (M2R), a leading provider of manufacturing execution software for the life sciences and consumer packaged goods related industries. The Company acquired 100% of the outstanding shares of M2R for a purchase price of approximately \$2.1 million. This acquisition was accounted for as a purchase, and accordingly, the results of operations from the date of acquisition are included in the Company's consolidated statements of operations. Pro forma information related to this acquisition is not presented as it is not material. The purchase price was allocated to the fair market value of assets acquired and liabilities assumed as follows (in thousands):

<u>Description</u>	<u>Amount</u>	<u>Life</u>
Acquired technology .....	\$1,230	3 years
Goodwill .....	<u>946</u>	5 years
	2,176	
Net book value of tangible assets acquired, less liabilities assumed . . .	<u>184</u>	
	2,360	
Less — Deferred taxes .....	<u>275</u>	
	<u><u>\$2,085</u></u>	

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
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The following information details the results of operations of the Company and Petrolsoft for the periods before the pooling-of-interests combination was consummated (in thousands, except for per share data):

	<u>Years Ended June 30,</u>	
	<u>1999</u>	<u>2000</u>
Revenue		
The Company .....	\$219,593	\$263,460
Petrolsoft .....	6,926	4,633
Combined .....	<u>\$226,519</u>	<u>\$268,093</u>
Net income (loss)		
The Company .....	\$(25,735)	\$ 5,591
Petrolsoft .....	4,940	(163)
Combined .....	<u>\$(20,795)</u>	<u>\$ 5,428</u>
Net income (loss) per share		
Diluted		
The Company .....	<u>\$ (1.04)</u>	<u>\$ 0.20</u>
Petrolsoft .....	<u>\$ 1.87</u>	<u>\$ (0.06)</u>
Combined .....	<u>\$ (0.76)</u>	<u>\$ 0.18</u>
Net income (loss) per share		
Basic		
The Company .....	<u>\$ (1.04)</u>	<u>\$ 0.22</u>
Petrolsoft .....	<u>\$ 1.87</u>	<u>\$ (0.06)</u>
Combined .....	<u>\$ (0.76)</u>	<u>\$ 0.19</u>

***(c) Acquisitions During Fiscal Year 2001***

On August 29, 2000, the Company acquired ICARUS Corporation and ICARUS Services Limited (together, ICARUS), a market leader in providing software that is used by process manufacturing industries to estimate plant capital costs and evaluate project economics. The Company acquired 100% of the outstanding shares and options to purchase shares of ICARUS for a purchase price of approximately \$24.9 million, consisting of \$12.4 million in shares of the Company's stock, \$9.0 million in cash and \$2.1 million in promissory notes, and \$1.4 million in transaction costs. This acquisition was accounted for as a purchase, and accordingly, the results of operations from the date of acquisition are included in the Company's consolidated statements of operations commencing as of the acquisition date.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The purchase price was allocated to the fair market value of assets acquired and liabilities assumed, as follows (in thousands):

<u>Description</u>	<u>Amount</u>	<u>Life</u>
Purchased in-process research and development .....	\$ 5,000	—
Goodwill .....	7,011	6 years
Acquired technology .....	7,000	6 years
Other intangibles .....	<u>300</u>	2 years
	19,311	
Net book value of tangible assets acquired, less liabilities assumed .....	<u>8,340</u>	
	27,651	
Less — Deferred taxes .....	<u>2,701</u>	
	<u>\$24,950</u>	

In the second quarter of fiscal 2001, the Company acquired Broner Systems (Broner) and certain assets of an internet-based trading company. These acquisitions were accounted for as purchase transactions, and accordingly, the results of operations from the dates of acquisition are included in the Company's consolidated condensed statements of operations commencing as of the acquisition dates. Total purchase price for these acquisitions were approximately \$10.9 million, consisting of \$9.5 million in cash, \$0.9 million in shares of the Company stock, and \$0.5 million in acquisition-related costs. Broner specializes in advanced planning and scheduling software specifically designed for the metals industry.

The purchase prices were allocated to the fair market value of assets acquired and liabilities assumed, as follows (in thousands):

<u>Description</u>	<u>Amount</u>	<u>Life</u>
Purchased in-process research and development .....	\$ 2,615	—
Acquired technology .....	4,400	3-5 years
Goodwill .....	2,631	5-7 years
Other intangibles .....	<u>780</u>	3 years
	10,426	
Net book value of tangible assets acquired, less liabilities assumed .....	<u>1,904</u>	
	12,330	
Less — Deferred taxes .....	<u>1,434</u>	
	<u>\$10,896</u>	

On June 15, 2001, the Company acquired the technology assets of the Houston Consulting Group and the process applications division of CPU, a New Orleans-based consulting firm. Houston Consulting Group and its industry-leading Orion software will provide the company with additional technology for refinery scheduling, while the assets acquired from CPU will provide additional integration products and capabilities.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

These acquisitions were accounted for as purchase transactions, and accordingly, the results of operations from the dates of acquisition are included in the Company's consolidated condensed statements of operations commencing as of the acquisition dates. Total purchase price for these acquisitions was approximately \$20.3 million, consisting of \$17.5 million in shares of the Company's stock, \$1.2 million in cash, \$0.8 million in stock options held by employees, as valued under the provisions of FIN 44, and \$0.8 million in acquisition-related costs.

The purchase prices were allocated to the fair market value of assets acquired and liabilities assumed, as follows (in thousands):

<u>Description</u>	<u>Amount</u>	<u>Life</u>
Purchased in-process research and development .....	\$ 2,300	—
Goodwill .....	9,856	5 years
Acquired technology .....	7,900	3-5 years
Other intangibles .....	<u>500</u>	3 years
	20,556	
Net book value of tangible assets acquired, less liabilities assumed .....	<u>(273)</u>	
	<u><u>\$20,283</u></u>	

***(d) Purchase Price Allocation***

Allocation of the purchase prices for all acquisitions were based on estimates of the fair value of the net assets acquired. The fair market value of intangible assets acquired was based on independent appraisals. In making each of these purchase price allocations, the Company considered present value calculations of income, an analysis of project accomplishments and remaining outstanding items and an assessment of overall contributions, as well as project risks. The values assigned to purchased in-process technology were determined by estimating the costs to develop the acquired technologies into commercially viable products, estimating the resulting net cash flows from the projects, and discounting the net cash flows to their present values. The revenue projections used to value the in-process research and development were based on estimates of relevant market sizes and growth factors, expected trends in technology, and the nature and expected timing of new product introductions by the Company and its competitors. The resulting net cash flows from the projects are based on estimates of cost of sales, operating expenses, and income taxes from the projects. The rates utilized to discount the net cash flows to their present value were based on estimated costs of capital calculations. Due to the nature of the forecasts and the risks associated with the projected growth and profitability of the developmental projects, discount rates of 20 to 30 percent were considered appropriate for the in-process research and development. Risks related to the completion of technology under development include the inherent difficulties and uncertainties in achieving technological feasibility, anticipated levels of market acceptance and penetration, market growth rates and risks related to the impact of potential changes in future target markets. Pro forma information related to these acquisitions is not presented as it is not material.

**(5) Line of Credit**

The Company maintains a \$30.0 million unsecured bank line of credit, expiring October 26, 2003, that provides for borrowings of specified percentages of eligible accounts receivable and eligible current installment contracts. Advances under the line of credit bear interest at a rate equal to the bank's prime rate (6.75% at June 30, 2001) or, at our option, a rate equal to a defined LIBOR (4.18% at June 30, 2001) plus a specified margin. The line of credit agreement requires us to provide the bank with certain periodic financial reports and to comply with certain financial tests, including maintenance of minimum levels of consolidated net worth and of the ratio of cash and cash equivalents, accounts receivable and current portion of our long term installments receivable to current liabilities. At June 30, 2001, there were no outstanding borrowings under the line of credit.



**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**(6) Long-Term Obligations**

Long-term obligations consist of the following at June 30, 2000 and 2001 (in thousands):

	<u>2000</u>	<u>2001</u>
Credit arrangement of a Belgian subsidiary with a bank .....	\$ 237	\$ 211
Mortgage payable of a UK subsidiary due in annual installments of approximately \$91 plus interest at 6% per year .....	1,040	885
Note payable of a Belgian subsidiary with annual installments of approximately \$126 through June 2012, plus interest ranging from 8.5% to 10%, payable in June 2010, 2011, and 2012. ....	1,082	989
Convertible Debenture of a Belgian subsidiary due in 2002, interest payable at an annual rate of 6%. This note is convertible into approximately 7,500 shares of the Company's common stock at the option of the holder .....	355	189
Capital lease obligation due in monthly installments of approximately \$55,000 plus interest at 9.3% per year through April 2001 .....	475	—
Promissory note due to former Icarus shareholder in August 2001, interest payable at an annual rate equal to prime rate .....	—	2,095
Other obligations .....	<u>61</u>	<u>69</u>
	3,250	4,438
Less — Current maturities .....	<u>1,327</u>	<u>2,539</u>
	<u>\$1,923</u>	<u>\$1,899</u>

Maturities of these long-term obligations are as follows (in thousands):

<u>Years Ending June 30,</u>	<u>Amount</u>
2002 .....	\$2,539
2003 .....	460
2004 .....	217
2005 .....	217
2006 .....	217
Thereafter .....	<u>788</u>
	<u>\$4,438</u>

**(7) 5¼% Convertible Subordinated Debentures**

In June 1998, the Company sold \$86.3 million of 5 1/4% Convertible subordinated debentures (the Debentures) to qualified institutional buyers in reliance on Rule 144A under the Securities Act of 1933. The Company has determined the fair value of the debentures based on the current trading prices to be \$82.5 million at June 30, 2001. The Debentures are convertible into shares of the Company's common stock at any time prior to June 15, 2005, unless previously redeemed or repurchased, at a conversion price of \$52.97 per share, subject to adjustment in certain events. Interest on the Debentures is payable on June 15 and December 15 of each year. The Debentures are redeemable in whole or part at the option of the Company at

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

any time on or after June 15, 2001 at the following redemption prices expressed as a percentage of principal plus accrued interest through the date of redemption:

<u>12 months beginning June 15 of</u>	<u>Redemption Price</u>
2001 .....	103.00%
2002 .....	102.25%
2003 .....	101.50%
2004 .....	100.75%

In the event of a change of control, as defined, each holder of the Debentures may require the Company to repurchase its Debentures, in whole or in part, for cash or, at the Company's option, for common stock (valued at 95% of the average last reported sale prices for the 5 trading days immediately preceding the repurchase date) at a repurchase price of 100% of the principal amount of the Debentures to be repurchased, plus accrued interest to the repurchase date. The Debentures are unsecured obligations subordinate in right of payment to all existing and future senior debt of the Company, as defined, and effectively subordinate in right of payment to all indebtedness and other liabilities of the Company's subsidiaries. The Company has filed a shelf registration statement in respect of the Debentures and common stock issuable upon conversion thereof.

In connection with this financing, the Company incurred approximately \$3.9 million of issuance costs. These costs have been classified as other assets in the accompanying consolidated balance sheets and are being amortized, as interest expense, over the term of the Debentures. Approximately \$3.0 million of the issuance costs related to fees paid to investment bankers in connection with the sale of the Debentures.

**(8) Preferred Stock**

The Company's Board of Directors is authorized, subject to any limitations prescribed by law, without further stockholder approval, to issue, from time to time, up to an aggregate of 10,000,000 shares of preferred stock in one or more series. Each such series of preferred stock shall have such number of shares, designations, preferences, voting powers, qualifications and special or relative rights or privileges, which may include, among others, dividend rights, voting rights, redemption and sinking fund provisions, liquidation preferences and conversion rights, as shall be determined by the Board of Directors in a resolution or resolutions providing for the issuance of such series. Any such series of preferred stock, if so determined by the Board of Directors, may have full voting rights with the common stock or superior or limited voting rights and may be convertible into common stock or another security of the Company.

**(9) Common Stock**

***(a) Warrants***

In connection with the August 1997 acquisition of NeuralWare, Inc., the Company converted warrants and options to purchase NeuralWare common stock into warrants and options to purchase 10,980 and 6,618 shares of the Company's common stock, respectively. During fiscal 1999, warrants to purchase 267 shares expired. All remaining warrants are currently exercisable with exercise prices that range between \$61.73 and \$135.80 per share.

In connection with the March 1998 acquisition of Zyqad Limited, the Company converted warrants to purchase Zyqad common stock into warrants to purchase 47,490 shares of the Company's common stock. All of these warrants were exercised in 1999 at an exercise price of \$28.94 per share.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**(b) Stock Options**

In November 1995, the Board of Directors approved the establishment of the 1995 Stock Option Plan (the 1995 Plan) and the 1995 Directors Stock Option Plan (the 1995 Directors Plan), which provided for the issuance of incentive stock options and nonqualified options. Under these plans, the Board of Directors may grant stock options to purchase up to an aggregate of 3,827,687 (as adjusted) shares of common stock. Shares available for grant under these plans were increased on July 1, 1996 and 1997 by an amount equal to 5% of the outstanding shares as of the preceding June 30. In December 1997, the shareholders approved an amendment to the 1995 Plan. The amendment provides for three annual increases in the number of shares for which options may be granted, beginning July 1, 1998 by an amount equal to 5% of the outstanding shares on the preceding June 30. On July 1, 1999 and 2000, the number of shares available under the 1995 Plan were increased by 1,247,711 shares and 1,442,398 shares, respectively. On December 7, 1999, the number of shares available under the 1995 Directors Plan were increased by 200,000. In December 1996, the shareholders of the Company approved the establishment of the 1996 Special Stock Option Plan (the 1996 Plan). This plan provides for the issuance of incentive stock options and nonqualified options to purchase up to 500,000 shares of common stock. The exercise price of options are granted at a price not less than 100% of the fair market value of the common stock on the date of grant. Stock options become exercisable over varying periods and expire no later than 10 years from the date of grant. As of June 30, 2001, there were 37,769, 114,400 and 6,175 shares of common stock available for grant under the 1995 Plan, the 1995 Directors Plan and the 1996 Plan, respectively. The following is a summary of stock option activity in fiscal 1999, 2000 and 2001:

	Number of Shares	Weighted Average Exercise Price
Outstanding, June 30, 1998 .....	4,451,189	\$14.76
Options granted .....	1,297,281	11.17
Options exercised .....	(67,496)	12.85
Options terminated .....	(379,907)	17.30
Outstanding, June 30, 1999 .....	5,301,067	14.14
Options granted .....	2,065,250	12.63
Options exercised .....	(868,412)	9.05
Options terminated .....	(298,807)	12.73
Outstanding, June 30, 2000 .....	6,199,098	14.38
Options granted .....	1,649,666	17.97
Options exercised .....	(958,027)	12.13
Options terminated .....	(166,025)	15.79
Outstanding, June 30, 2001 .....	<u>6,724,712</u>	<u>\$15.42</u>
Exercisable, June 30, 2001 .....	<u>3,234,441</u>	<u>\$15.79</u>

In December 2000, the shareholders approved the establishment of the 2001 Stock Option Plan (the 2001 Plan), which provides for the issuance of incentive stock options and nonqualified options. Under the 2001 Plan the Board of Directors may grant stock options to purchase up to an aggregate of 4,000,000 shares of common stock. At July 1, 2002 and July 1, 2003, the 2001 Plan will be expanded to cover an additional 5% of the outstanding shares on the preceding June 30, rounded down to the nearest number divisible by 10,000. In no event, however, may the number of shares subject to incentive options under the 2001 Option Plan exceed 8,000,000 unless the 2001 Plan is amended, and approved, by the shareholders. As of June 30, 2001, the Company has not issued options under the 2001 Plan.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

In connection with the acquisition of Petrolsoft during Fiscal 2000, the Company assumed the Petrolsoft option plan (the Petrolsoft Plan). Under the Petrolsoft Plan, the Board of Directors of Petrolsoft was entitled to grant either incentive or nonqualified stock options for a maximum of 264,110 shares of common stock to eligible employees, as defined.

Stock option activity under the Petrolsoft Plan (as converted into options to purchase the Company's stock) is as follows:

	Number of Shares	Weighted Average Exercise Price
Outstanding, June 30, 1999 .....	55,022	\$11.36
Options granted .....	77,692	11.36
Options terminated .....	<u>(11,004)</u>	<u>11.36</u>
Outstanding, June 30, 2000 .....	121,710	11.36
Options exercised .....	(20,724)	11.36
Options terminated .....	<u>(15,061)</u>	<u>11.36</u>
Outstanding June 30, 2001 .....	<u>85,925</u>	<u>\$11.36</u>
Exercisable June 30, 2001 .....	<u>23,541</u>	<u>\$11.36</u>

No future grants are available under the Petrolsoft Plan. The options outstanding under the Petrolsoft Plan as of June 30, 2000 have a weighted average remaining contractual life of 8.9 years.

During fiscal year 2000, Petrolsoft established a Stock Appreciation Rights agreement for certain employees. Stock Appreciation Rights (SARs) were granted at an option price which was not less than the fair market value as determined by Petrolsoft's Board appointed committee on the date of grant. In fiscal year ended June 30, 2000, Petrolsoft issued 55,000 SARs with an option price of \$5.00 per right. 50,000 of these SARs were forfeited due to termination of employment prior to the acquisition date and the remaining 5,000 were settled in June 2000 in accordance with the SAR agreement.

The following tables summarize information about stock options outstanding and exercisable under the 1995 Plan, the 1995 Directors' Plan and the 1996 Plan at June 30, 2001:

Range of Exercise Prices	Options Outstanding at June 30, 2001	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Options Exercisable at June 30, 2001	Weighted Average Exercise Price
\$2.66 — \$4.33 .....	201,710	2.0	\$ 3.08	201,710	\$ 3.08
4.33 — 8.66 .....	1,366,169	8.0	8.25	560,593	8.09
8.66 — 13.00 .....	153,858	7.1	10.17	63,232	9.96
13.00 — 17.33 .....	3,593,309	7.3	14.26	1,681,924	14.45
17.33 — 26.00 .....	555,063	8.6	22.17	178,781	23.26
26.00 — 39.00 .....	786,587	7.2	30.39	510,387	29.95
39.00 — 43.34 .....	<u>68,016</u>	<u>7.4</u>	<u>40.43</u>	<u>37,814</u>	<u>40.35</u>
June 30, 2001 .....	<u>6,724,712</u>	<u>7.4</u>	<u>\$15.42</u>	<u>3,234,441</u>	<u>\$15.79</u>
Exercisable, June 30, 2000 .....				<u>2,821,810</u>	<u>\$14.72</u>
Exercisable, June 30, 1999 .....				<u>2,454,674</u>	<u>\$12.69</u>

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**(c) Fair Value of Stock Options**

SFAS No. 123 *Accounting for Stock-Based Compensation* requires the measurement of the fair value of stock options to be included in the statement of income or disclosed in the notes to financial statements. The Company has determined that it will continue to account for stock-based compensation for employees under Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, and elect the disclosure-only alternative under SFAS No. 123.

Had compensation cost for the Company's option plans been determined based on the fair value at the grant dates, as prescribed in SFAS No. 123, the Company's net income (loss), and net income (loss) per share would have been as follows:

	<u>1999</u>	<u>2000</u>	<u>2001</u>
Net (loss) income (in thousands) —			
As reported .....	\$(20,795)	\$ 5,428	\$(20,375)
Pro forma .....	(41,293)	(18,117)	(46,029)
Net (loss) income per share —			
Diluted —			
As reported .....	\$ (0.76)	\$ 0.18	\$ (0.68)
Pro forma .....	(1.50)	(0.59)	(1.54)
Basic —			
As reported .....	\$ (0.76)	\$ 0.19	\$ (0.68)
Pro forma .....	(1.50)	(0.64)	(1.54)

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions used for grants during the applicable period:

	<u>1999</u>	<u>2000</u>	<u>2001</u>
Risk free interest rates .....	4.39-5.49%	5.73-6.71%	5.14-6.05%
Expected dividend yield .....	None	None	None
Expected life .....	5 Years	5 Years	5 Years
Expected volatility .....	136%	86%	101%
Weighted average fair value per option .....	\$13.23	\$11.05	\$16.97

**(d) Employee Stock Purchase Plans**

In October 1997, the Company's Board of Directors approved the 1998 Employee Stock Purchase Plan, under which the Board of Directors may grant stock purchase rights for a maximum of 1,000,000 shares through September 30, 2007. In December 2000, the shareholders voted to increase the number of shares eligible under the 1998 Employee Stock Purchase Plan to 3,000,000 shares.

Participants are granted options to purchase shares of common stock on the last business day of each semiannual payment period for 85% of the market price of the common stock on the first or last business day of such payment period, whichever is less. The purchase price for such shares is paid through payroll deductions, and the current maximum allowable payroll deduction is 10% of each eligible employee's compensation. Under the plan, the Company issued 267,324, 384,864 and 174,463 shares during fiscal 1999, 2000 and 2001, respectively. As of June 30, 2001, there were 2,173,349 shares available for future issuance under the 1998 Employee Stock Purchase Plan as amended. In addition, on July 1, 2001, the Company issued 132,019 shares under the 1998 Employee Stock Purchase Plan.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

***(e) Stockholder Rights Plan***

During fiscal 1998, the Board of Directors of the Company adopted a Stockholder Rights Agreement (the Rights Plan) and distributed one Right for each outstanding share of Common Stock. The Rights were issued to holders of record of Common Stock outstanding on March 12, 1998. Each share of Common Stock issued after March 12, 1998 will also include one Right, subject to certain limitations. Each Right when it becomes exercisable will initially entitle the registered holder to purchase from the Company one one-hundredth (1/100th) of a share of Series A Preferred Stock at a price of \$175.00 (the Purchase Price).

The Rights will become exercisable and separately transferable when the Company learns that any person or group has acquired beneficial ownership of 15% or more of the outstanding Common Stock or on such other date as may be designated by the Board of Directors following the commencement of, or first public disclosure of an intent to commence, a tender or exchange offer for outstanding Common Stock that could result in the offeror becoming the beneficial owner of 15% or more of the outstanding Common Stock. In such circumstances, holders of the Rights will be entitled to purchase, for the Purchase Price, a number of hundredths of a share of Series A Preferred Stock equivalent to the number of shares of Common Stock (or, in certain circumstances, other equity securities) having a market value of twice the Purchase Price. Beneficial holders of 15% or more of the outstanding Common Stock, however, would not be entitled to exercise their Rights in such circumstances. As a result, their voting and equity interests in the Company would be substantially diluted if the Rights were to be exercised.

The Rights expire in March 2008, but may be redeemed earlier by the Company at a price of \$.01 per Right, in accordance with the provisions of the Rights Plan.

***(f) Restricted Stock***

In fiscal 2001, restricted stock covering 94,500 shares of the Company's common stock was issued. The restricted stock is subject to vesting terms whereby the entire amount will vest upon the earlier of seven years from the date of grant or the attainment of certain performance goals, as defined.

Consideration of \$3.00 per share was received for these shares, resulting in deferred compensation of \$1,500,000 based on the fair market value on the date of issuance of the restricted stock. Of this deferred compensation, \$65,000 has been expensed in the accompanying fiscal 2001 consolidated statement of operations. The consideration received is in the form of secured promissory notes from the holders of the restricted stock. These notes are subject to interest at an annual rate of 5.07%, are due seven years from the date of issuance and are secured by the restricted stock. The interest under these notes is subject to full recourse against the personal assets of the holders of the restricted stock.

**(10) Income Taxes**

The Company accounts for income taxes under the provisions of SFAS No. 109, *Accounting for Income Taxes*. Under the liability method specified by SFAS No. 109, a deferred tax asset or liability is measured based on the difference between the financial statement and tax bases of assets and liabilities, as measured by the enacted tax rates. Proforma provision for (benefit from) income taxes assumes earnings for Petrolsoft, an acquired subchapter S-Corporation accounted for as a pooling-of-interests, were taxed at the Company's effective tax rate.



**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Income (loss) before provision for (benefit from) income taxes consists of the following (in thousands):

	<b>Years Ended June 30,</b>		
	<b>1999</b>	<b>2000</b>	<b>2001</b>
Domestic .....	\$ (38,123)	\$ 5,824	\$ (26,757)
Foreign .....	<u>1,519</u>	<u>1,928</u>	<u>(2,350)</u>
Total .....	<u><u>\$ (36,604)</u></u>	<u><u>\$ 7,752</u></u>	<u><u>\$ (29,107)</u></u>

The provisions for (benefit from) income taxes shown in the accompanying consolidated statements of operations are composed of the following (in thousands):

	<b>Years Ended June 30,</b>		
	<b>1999</b>	<b>2000</b>	<b>2001</b>
Federal —			
Current .....	\$ (3,353)	\$ 223	\$ (3,433)
Deferred .....	(13,111)	544	(5,255)
State —			
Current .....	104	1,441	(219)
Deferred .....	(1,013)	(1,092)	(1,035)
Foreign —			
Current .....	<u>1,564</u>	<u>1,208</u>	<u>1,210</u>
	<u><u>\$ (15,809)</u></u>	<u><u>\$ 2,324</u></u>	<u><u>\$ (8,732)</u></u>
Proforma .....	<u><u>\$ (14,538)</u></u>	<u><u>\$ 2,324</u></u>	

The provision for income taxes differs from the federal statutory rate due to the following:

	<b>Years Ended June 30,</b>		
	<b>1999 Benefit</b>	<b>2000 Provision</b>	<b>2001 Benefit</b>
Federal tax at statutory rate .....	35.0%	34.0%	34.0%
State income tax, net of federal tax benefit .....	2.1	3.0	2.8
Foreign tax .....	(2.7)	4.5	(5.4)
Tax credits generated .....	5.3	(24.3)	9.9
Permanent differences, net .....	(0.7)	7.8	(2.2)
Acquisition costs .....	—	5.0	(0.8)
Valuation allowance and other .....	<u>4.2</u>	<u>—</u>	<u>(8.3)</u>
Provision for/benefit from income taxes .....	<u><u>43.2%</u></u>	<u><u>30.0%</u></u>	<u><u>30.0%</u></u>
Proforma .....	<u><u>39.7%</u></u>	<u><u>30.0%</u></u>	

The components of the net deferred tax asset (liability) recognized in the accompanying consolidated balance sheets are as follows (in thousands):

	<b>June 30,</b>	
	<b>2000</b>	<b>2001</b>
Deferred tax assets .....	\$ 17,740	\$ 32,356
Deferred tax liabilities .....	<u>(4,310)</u>	<u>(13,418)</u>
	<u><u>\$ 13,430</u></u>	<u><u>\$ 18,938</u></u>

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The approximate tax effect of each type of temporary difference and carry forward is as follows (in thousands):

	<u>June 30,</u>	
	<u>2000</u>	<u>2001</u>
Revenue related .....	\$(1,143)	\$(2,503)
US Income tax credits .....	9,528	15,443
US operating losses carryforward .....	1,553	1,020
Restructuring items .....	4,124	5,178
Nondeductible reserves and accruals .....	3,878	5,490
Intangible assets .....	(2,653)	(3,647)
Other temporary differences .....	<u>(514)</u>	<u>1,722</u>
	14,773	22,703
Valuation allowance .....	<u>(1,343)</u>	<u>(3,765)</u>
	<u>\$13,430</u>	<u>\$18,938</u>

The tax credits and net operating loss carryforwards expire at various dates from 2001 through 2021. Due to the uncertainty surrounding the realization and timing of these tax attributes, the Company has recorded a valuation allowance of approximately \$1,343,000 and \$3,765,000 as of June 30, 2000 and 2001, respectively.

The Tax Reform Act of 1986 contains provisions that may limit the net operating loss and tax credit carryforwards available to be used in any given year in the event of significant changes in ownership, as defined.

**(11) Operating Leases**

The Company leases its facilities and various office equipment under noncancellable operating leases with terms in excess of one year. Rent expense charged to operations was approximately \$7,324,000, \$7,537,000 and \$10,470,000 for the years ended June 30, 1999, 2000 and 2001, respectively. Future minimum lease payments under these leases as of June 30, 2001 are as follows (in thousands):

Years Ending June 30,	<u>Amount</u>
2002 .....	\$ 13,407
2003 .....	\$ 13,107
2004 .....	\$ 11,893
2005 .....	\$ 11,308
2006 .....	\$ 11,429
Thereafter .....	<u>\$ 61,448</u>
	<u>\$122,592</u>

**(12) Sale of Installments Receivable**

The Company sold, with limited recourse, certain of its installment contracts to two financial institutions for aggregate proceeds of \$28.0 million and \$55.6 million during fiscal 2000 and 2001, respectively. The financial institutions have partial recourse to the Company only upon nonpayment by the customer under the installments receivable. The amount of recourse is determined pursuant to the provisions of the Company's contracts with the financial institutions and varies depending on whether the customers under the installment

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

contracts are foreign or domestic entities. Collections of these receivables reduce the Company's recourse obligation, as defined.

At June 30, 2001, the balance of the uncollected principal portion of the contracts sold with partial recourse was approximately \$108.5 million. The Company's potential recourse obligation related to these contracts is approximately \$6.2 million as of June 30, 2001. In addition, the Company is obligated to pay additional costs to the financial institutions in the event of default by the customer.

**(13) Commitments and Contingencies**

The Company has entered into agreements with six executive officers providing for the payment of cash and other benefits in certain events of their voluntary or involuntary termination within three years following a change in control. Payment under these agreements would consist of a lump sum equal to approximately three years of each executive's annual taxable compensation. The agreements also provide that the payment would be increased in the event that it would subject the officer to excise tax as a parachute payment under the federal tax code. The increase would be equal to the additional tax liability imposed on the executive as a result of the payment.

**(14) Retirement and Profit Sharing Plans**

The Company maintains a defined contribution retirement plan under Section 401(k) of the Internal Revenue Code covering all eligible employees, as defined. Under the plan, a participant may elect to defer receipt of a stated percentage of his or her compensation, subject to limitation under the Internal Revenue Code, which would otherwise be payable to the participant for any plan year. The Company may make discretionary contributions to this plan. During 1997, the plan was modified to provide, among other changes, for the Company to make matching contributions equal to 25% of pretax employee contributions up to a maximum of 6% of an employee's salary. During the fiscal years ended June 30, 1999, 2000 and 2001, the Company made matching contributions of approximately \$1.0 million, \$1.0 million and \$1.3 million respectively.

Petrolsoft also maintained a defined contribution (401k) retirement plan covering all full-time employees. Under the plan, a participant may elect to defer receipt of a stated percentage of his or her compensation, subject to limitation under the Internal Revenue Code, which would otherwise be payable to the participant for any plan year. The plan provided for Petrolsoft to make matching contributions equal to 25% of pretax employee contributions up to a maximum of 6% of an employee's salary. During the fiscal years ended June 30, 1999 and June 30, 2000, Petrolsoft made matching contributions of approximately \$13,000 and \$14,000, respectively. This plan was merged with the Company's plan as of July 1, 2000.

Petrolsoft also maintained a profit sharing plan for its employees whereby all eligible employees may receive a Board determined percentage of Petrolsoft's taxable operating profits based on their employment tenure. During the fiscal years ended June 30, 1999 and June 30, 2000, the total amount paid by Petrolsoft to its employees was approximately \$15,000 and \$61,000, respectively. This plan was terminated as of June 1, 2000.

The Company does not provide postretirement benefits to any employees as defined under SFAS No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions.

**(15) Joint Ventures and Other Investments**

In May 1993, the Company entered into an Equity Joint Venture agreement with China Petrochemical Technology Company to form a limited liability company governed by the laws of the People's Republic of China. This joint venture has the nonexclusive right to distribute the Company's products within the People's

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

Republic of China. The Company invested \$300,000 on August 6, 1993, which represents a 30% equity interest in the joint venture.

In November 1993, the Company invested approximately \$100,000 in a Cyprus-based company, representing approximately a 14% equity interest. In December 1995, the Company exercised its option to increase its equity interest to 22.5%, acquiring additional shares for approximately \$125,000. In August 2000, a third party invested in the entity and purchased a portion of the existing shareholders' equity interests. As a result of this transaction, the Company's equity interest increased to 31.58% and the Company recorded a gain of \$225,000.

The Company is accounting for the above two investments using the equity method. The net investments of approximately \$519,000 are included in other assets in the accompanying consolidated balance sheets. In the accompanying consolidated statements of operations for the years ended June 30, 1999, 2000, and 2001, the Company has recognized approximately \$19,000, \$4,000 and \$195,000 respectively, as its portion of the income from these joint ventures.

In March 2000, the Company and e-Chemicals entered into a Stock Purchase Agreement whereby the Company acquired 833,333 shares of e-Chemicals non-voting Series E Preferred Stock for \$6.00 per share. This \$5 million investment entitled the Company to a minority interest in e-Chemicals and was accounted for using the cost method. During the second quarter of fiscal 2001, the Company deemed this investment in the stock of e-Chemicals to be worthless and, as a result, this investment was written off. This write-off is included in the accompanying consolidated statement of operations for fiscal 2001.

During the quarter ended June 30, 2000, the Company made a \$2.0 million investment in Extricity, a related party (see Note 17). This investment entitled the Company to a minority interest in Extricity and was initially accounted for using the cost method. In the fourth quarter of fiscal 2001 Extricity was purchased by Peregrine Systems (Peregrine), a publicly-traded company. In connection with this purchase, the Company's investment was converted into 94,510 shares of Peregrine. The Company sold 85,059 of these shares in June 2001 and recorded a gain of \$430,000 at that time. The remaining 9,451 shares held in Peregrine are held in escrow as per the terms of the purchase agreement between Extricity and Peregrine. These shares are classified as short-term investments in the accompanying consolidated balance sheet at June 30, 2000 (See note 2(c)).

In November 2000, the Company invested \$600,000 in a global chemical B2B e-commerce site supporting major chemical companies in Asia. This investment entitles the Company to a minority interest in the joint venture and is accounted for using the cost method and, accordingly, is being valued at cost unless a permanent impairment in its value occurs or the investment is liquidated. As of June 30, 2001, the Company has determined that a permanent impairment has not occurred. This investment is included in other assets in the accompanying consolidated balance sheet as of June 30, 2001. The Company believes that all transactions with the joint venture are rendered at arm's length.

In December 2000, the Company made a \$3.0 million investment in e-Catalysts, Inc. (e-Catalysts), a neutral marketplace for all trading partners in the catalyst industry including raw material suppliers, manufacturers, service providers and end users. This investment entitled the Company to a 33% interest in e-Catalysts and has been accounted for using the equity method. In connection with the restructuring plan in the fourth quarter of fiscal 2001 (see Note 3(b)), the Company assessed its e-business strategy and elected to no longer support e-Catalysts. The decision to cease financial support for e-Catalysts resulted in an impairment in the value of the asset. The amount of such impairment was included in the restructuring charge recorded by the Company in the fourth quarter of fiscal 2001. Before the impairment, the Company recorded its portion of a \$100,000 loss in the accompanying consolidated statements of operations in fiscal 2001. The Company believes that all transactions with e-Catalysts have been rendered at arm's length.

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

In March 2001, the Company made an initial \$8.3 million investment in Optimum Logistics Ltd. (Optimum), an internet-based open logistics system for bulk materials. This investment consisted of 219,515 shares of the Company's stock, valued at \$5.7 million on the date of the transaction, plus \$2.6 million in cash. This investment entitles the Company to a minority interest in Optimum and is accounted for using the cost method and, accordingly, is being valued at cost unless a permanent impairment in its value occurs or the investment is liquidated. As of June 30, 2001, the Company has determined that a permanent impairment has not occurred. The valuation of this investment is subject to adjustment based on the finalization of the purchase price. In addition the Company may provide up to \$2.3 million of additional capital to Optimum, based on its ownership percentage. In fiscal 2001, the Company made \$900,000 of this funding, bringing the value of the investment at June 30, 2001 to \$9.3 million. This investment is included in other assets on the accompanying consolidated balance sheet at June 30, 2001. The Company believes that all transactions with Optimum are rendered at arm's length.

Subsequent to June 30, 2001 the Company entered into a joint venture in Japan with a third party. The joint venture will operate in Japan and Korea and is designed to allow the Company to penetrate those markets more quickly than it could on its own, by using joint resources to sell licenses and to deploy those licenses using the local based services of the joint venture employees. The Company has a 50% ownership in this joint venture and has invested \$800,000 in August 2001, with a commitment to invest an additional \$400,000 to fund operations in the future. This investment will be accounted for using the equity method. The Company believes that all transactions with the joint venture are rendered at arm's length.

**(16) Accrued Expenses**

Accrued expenses in the accompanying consolidated balance sheets consist of the following (in thousands):

	June 30,	
	2000	2001
Income taxes .....	\$ 9,562	\$ 8,418
Payroll and payroll-related .....	14,801	12,008
Royalties and outside commissions .....	2,774	2,382
Restructuring and other charges .....	3,832	6,152
Payable to financing companies .....	1,781	12,902
Other .....	11,894	13,983
	<u>\$44,644</u>	<u>\$55,845</u>

**(17) Related Party Transactions**

Smart Finance & Co., a company of which a former director of the Company is the President, provides advisory services to the Company from time to time. In fiscal 1999, 2000 and 2001, payments of approximately \$279,000, \$118,000 and \$30,000, respectively, were made by the Company to Smart Finance & Co. as compensation for services rendered. Included in fiscal 1999 was approximately \$200,000 paid in relation to services rendered at arm's length in fiscal 1998 relating to the 5¼% Convertible Debenture Offering.

On September 30, 1999, the Company entered into a "Software License Distribution and Strategic Relationship" agreement with Extricity, a leading provider of business-to-business e-commerce software. The Company has partnered with Extricity to deliver e-commerce solutions that will enhance integration and automate the flow of information between disparate supply chain and enterprise resource planning systems and customers, suppliers and trading partners. The President and Chief Executive Officer of Extricity is the spouse

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

of one of the Company's former directors. During fiscal 2000 the Company paid \$1.3 million in prepaid royalty fees to Extricity; an additional \$0.7 million was paid in July 2000. The Company is reducing the prepaid assets as sales of the e-commerce software are made. The remaining asset related to this prepaid royalty as of June 30, 2001 is \$1.6 million.

**(18) Segment and Geographic Information**

The Company follows the provisions of SFAS No. 131, which establishes standards for reporting information about operating segments in annual financial statements and requires selected information about operating segments in interim financial reports issued to stockholders. It also established standards for disclosures about products and services, and geographic areas. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the Chief Executive Officer of the Company.

The Company is organized geographically and by line of business. The Company has three major line of business operating segments: license, consulting services and maintenance and training. The Company also evaluates certain subsets of business segments by vertical industries as well as by product categories. While the Executive Management Committee evaluates results in a number of different ways, the line of business management structure is the primary basis for which it assesses financial performance and allocates resources.

The license line of business is engaged in the development and licensing of software. The consulting services line of business offers implementation, advanced process control, real-time optimization and other consulting services in order to provide its customers with complete solutions. The maintenance and training line of business provides customers with a wide range of support services that include on-site support, telephone support, software updates and various forms of training on how to use the Company's products.

The accounting policies of the line of business operating segments are the same as those described in the summary of significant accounting policies. The Company does not track assets or capital expenditures by operating segments. Consequently, it is not practical to show assets, capital expenditures, depreciation or amortization by operating segments.



**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

The following table presents a summary of operating segments (in thousands):

	<u>License</u>	<u>Consulting Services</u>	<u>Maintenance and Training</u>	<u>Total</u>
Year ended June 30, 1999 —				
Revenues from unaffiliated customers . . . . .	\$ 97,108	\$ 89,978	\$39,433	\$226,519
Controllable expenses . . . . .	<u>33,306</u>	<u>69,446</u>	<u>12,119</u>	<u>114,871</u>
Controllable margin(1) . . . . .	<u>\$ 63,802</u>	<u>\$ 20,532</u>	<u>\$27,314</u>	<u>\$111,648</u>
Year ended June 30, 2000 —				
Revenues from unaffiliated customers . . . . .	\$132,843	\$ 91,133	\$44,117	\$268,093
Controllable expenses . . . . .	<u>46,315</u>	<u>69,343</u>	<u>10,757</u>	<u>126,415</u>
Controllable margin(1) . . . . .	<u>\$ 86,528</u>	<u>\$ 21,790</u>	<u>\$33,360</u>	<u>\$141,678</u>
Year ended June 30, 2001 —				
Revenues from unaffiliated customers . . . . .	\$147,448	\$106,521	\$56,655	\$310,624
Controllable expenses . . . . .	<u>55,059</u>	<u>72,560</u>	<u>13,438</u>	<u>141,057</u>
Controllable margin(1) . . . . .	<u>\$ 92,389</u>	<u>\$ 33,961</u>	<u>\$43,217</u>	<u>\$169,567</u>

- (1) The Controllable Margins reported reflect only the expenses of the line of business and do not represent the actual margins for each operating segment since they do not contain an allocation for selling and marketing, general and administrative, development and other corporate expenses incurred in support of the line of business.

**Profit Reconciliation:**

	<u>Years Ended June 30</u>		
	<u>1999</u>	<u>2000</u>	<u>2001</u>
	<u>(in thousands)</u>		
Total controllable margin for reportable segments . . . . .	\$111,648	\$141,678	\$ 169,567
Selling and marketing . . . . .	(68,867)	(72,258)	(96,467)
Research and development . . . . .	(3,214)	(877)	(12,587)
General and administrative and overhead . . . . .	(62,644)	(63,414)	(73,204)
Costs related to acquisitions . . . . .	—	(1,547)	—
Restructuring and other charges . . . . .	(17,867)	—	(6,969)
Charge for in-process research and development . . . . .	—	—	(9,915)
Interest and other income and expense . . . . .	4,340	4,170	5,468
Write-off of investment . . . . .	—	—	(5,000)
Income (loss) before provision for (benefit from) income taxes . . . . .	<u>\$ (36,604)</u>	<u>\$ 7,752</u>	<u>\$ (29,107)</u>

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**

**Geographic Information:**

Domestic and export sales as a percentage of total revenues are as follows:

	<u>Years Ended June 30,</u>		
	<u>1999</u>	<u>2000</u>	<u>2001</u>
United States .....	48.2%	54.6%	51.2%
Europe .....	34.6	27.5	27.7
Japan .....	4.3	4.8	5.3
Other .....	12.9	13.1	15.8
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Revenues, income (loss) from operations and identifiable assets for the Company's North American, European and Asian operations are as follows (in thousands). The Company has intercompany distribution arrangements with its subsidiaries. The basis for these arrangements, disclosed below as transfers between geographic locations, is cost plus a specified percentage for services and a commission rate for sales generated in the geographic region.

	<u>North America</u>	<u>Europe</u>	<u>Asia</u>	<u>Eliminations</u>	<u>Consolidated</u>
Year ended June 30, 1999 —					
Revenues .....	<u>\$190,638</u>	<u>\$62,352</u>	<u>\$13,426</u>	<u>\$ (39,897)</u>	<u>\$226,519</u>
Identifiable assets .....	<u>\$347,434</u>	<u>\$55,337</u>	<u>\$ 8,735</u>	<u>\$(101,637)</u>	<u>\$309,869</u>
Year ended June 30, 2000 —					
Revenues .....	<u>\$232,616</u>	<u>\$59,456</u>	<u>\$16,206</u>	<u>\$ (40,185)</u>	<u>\$268,093</u>
Identifiable assets .....	<u>\$386,081</u>	<u>\$54,982</u>	<u>\$11,456</u>	<u>\$(103,456)</u>	<u>\$349,063</u>
Year ended June 30, 2001 —					
Revenues .....	<u>\$268,306</u>	<u>\$69,188</u>	<u>\$21,185</u>	<u>\$ (48,055)</u>	<u>\$310,624</u>
Identifiable assets .....	<u>\$400,794</u>	<u>\$49,907</u>	<u>\$16,956</u>	<u>\$(113,691)</u>	<u>\$353,966</u>

## **REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS ON SCHEDULE**

To Aspen Technology, Inc.

We have audited, in accordance with auditing standards generally accepted in the United States, the consolidated financial statements included in Aspen Technology, Inc. and subsidiaries. Annual Report to Shareholders, included in this Form 10-K, and have issued our report thereon dated August 3, 2001. Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule listed in Item 14(a)-2 is the responsibility of the Company's management, is presented for purposes of complying with the Securities and Exchange Commission's rules and is not part of the basic financial statements. This schedule has been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, fairly states, in all material respects, the financial data required to be set forth therein, in relation to the basic financial statements taken as a whole.

ARTHUR ANDERSEN LLP

Boston, Massachusetts

August 3, 2001

**ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES**  
**VALUATION AND QUALIFYING ACCOUNTS**  
**(in thousands)**

<u>Description</u>	<u>Balance, Beginning of Period</u>	<u>Charged to Costs and Expenses</u>	<u>Deductions</u>	<u>Other</u>	<u>Balance, End of Period</u>
ALLOWANCE FOR DOUBTFUL ACCOUNTS:					
June 30, 1999(2) .....	\$1,482	\$ 689	\$(1,108)	\$225	\$1,288
June 30, 2000(1) .....	1,288	112	(11)	50	1,439
June 30, 2001(1) .....	1,439	23	(175)	618	1,905

(1) Other relates primarily to amounts acquired in acquisitions.

(2) Other relates to miscellaneous income item classified into the allowance for doubtful accounts.

## EXHIBIT INDEX

- 3.1(1) Certificate of Incorporation of Aspen Technology, Inc.
- 3.2(1) By-laws of Aspen Technology, Inc.
- 4.1(2) Specimen Certificate for Shares of Aspen Technology, Inc.'s common stock, \$.10 par value.
- 4.2(1) Rights Agreement dated as of March 12, 1998 between Aspen Technology, Inc. and American Stock Transfer and Trust Company, as Rights Agent, including related forms of the following: (a) Certificate of Designation of Series A Participating Cumulative Preferred Stock of Aspen Technology, Inc.; and (b) Right Certificate.
- 4.3(3) Indenture dated as of June 17, 1998 between Aspen Technology, Inc. and The Chase Manhattan Bank, as trustee, with respect to up to \$86,250,000 principal amount of 5¼% Convertible Subordinated Debentures due June 15, 2005 of Aspen Technology, Inc.
- 4.4(3) Form of 5¼% Convertible Subordinated Debentures due June 15, 2005 of Aspen Technology, Inc. (included in Sections 2.2, 2.3 and 2.4 of the Indenture filed as Exhibit 4.1 to the Current Report on Form 8-K).
- 10.1(4) Lease Agreement dated as of January 30, 1992 between Aspen Technology, Inc. and Teachers Insurance and Annuity Association of America regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.2(10) First amendment to Lease Agreement dated May 5, 1997 between Aspen Technology, Inc. and Beacon Properties, L.P., successor-in-interest to Teachers Insurance and Annuity Association of America, regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.3(10) Second Amendment to Lease Agreement dated as of August 14, 2000 between Aspen Technology, Inc. and EOP-Ten Canal Park, L.L.C., successor-in-interest to Beacon Properties, L.P. regarding Ten Canal Park, Cambridge, Massachusetts.
- 10.4(4) System License Agreement between Aspen Technology, Inc. and the Massachusetts Institute of Technology, dated March 30, 1982, as amended.
- 10.5(4)† Non-Equilibrium Distillation Model Development and License Agreement between Aspen Technology, Inc. and Koch Engineering Company, Inc., as amended.
- 10.6(4)† Letter, dated October 19, 1994, from Aspen Technology, Inc. to Koch Engineering Company, Inc., pursuant to which Aspen Technology, Inc. elected to extend the term of Aspen Technology, Inc.'s license under the Non-Equilibrium Distillation Model Development and License Agreement.
- 10.7(4)† Batch Distillation Computer Program Development and License Agreement between Process Simulation Associates, Inc. and Koch Engineering Company, Inc.
- 10.8(4)† Agreement between Aspen Technology, Inc. and Imperial College of Science, Technology and Medicine regarding Assignment of SPEEDUP.
- 10.9(4) Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 10.10(6) Rider No. 1, dated December 14, 1994, to Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 10.11(4)† Letter Agreement between Aspen Technology, Inc. and Sanwa Business Credit Corporation.
- 10.12(4) Equity Joint Venture Contract between Aspen Technology, Inc. and China Petrochemical Technology Company.
- 10.13(7) Further Amended and Restated Revolving Credit Agreement dated as of February 15, 1996 among Aspen Technology, Inc., Prosys Modeling Investment Corporation, Industrial Systems, Inc., Dynamic Matrix Control Corporation and Setpoint, Inc., as the Borrowers, the Lenders Parties thereto, and Fleet Bank of Massachusetts, N.A., as Agent and Lender, together with related forms of the following (each in the form executed by each of such Borrowers):
  - (a) Amended and Restated Revolving Credit Note.
  - (b) Patent Conditional Assignment and Security Agreement.
  - (c) Trademark Collateral Security Agreement.
  - (d) Security Agreement.
- 10.14(14) Credit Agreement between Fleet National Bank and Aspen Technology, Inc. dated October 27, 2000.

- 10.15(10) Letter dated September 21, 1999, from Fleet National Bank to Aspen Technology, Inc. and Deposit Pledge Agreement dated as of October 18, 1999 between Fleet National Bank and Aspen Technology, Inc. further amending the Revolving Credit Agreement.
- 10.16(16) Registration Rights Agreement dated June 1, 2000 between Aspen Technology, Inc. and the former stockholders of Petrolsoft Corporation.
- 10.17(10) Registration Rights Agreement dated August 29, 2000 between Aspen Technology, Inc. and the former stockholders of ICARUS Corporation and ICARUS Services Limited.
- 10.18(15) Registration Rights Agreement dated June 15, 2001 between Aspen Technology, Inc. and Michael B. Feldman.
- 10.19(15) Registration Rights Agreement dated June 15, 2001 between Aspen Technology, Inc. and the former stockholders of Computer Processes Unlimited, L.L.C.
- 10.20(4) 1988 Non-Qualified Stock Option Plan, as amended.
- 10.21(5) 1995 Stock Option Plan.
- 10.22(5) 1995 Directors Stock Option Plan.
- 10.23(5) 1995 Employees' Stock Purchase Plan.
- 10.24(9) 1998 Employees' Stock Purchase Plan.
- 10.25(12) Amendment to 1998 Employees' Stock Purchase Plan.
- 10.26(8) 1996 Special Stock Option Plan.
- 10.27(12) 2001 Stock Option Plan.
- 10.28(13) Petrolsoft Corporation Stock Option Plan.
- 10.29(4) Form of Employee Confidentiality and Non-Competition Agreement.
- 10.30(4) Noncompetition, Confidentiality and Proprietary Rights Agreement between Aspen Technology, Inc. and Lawrence B. Evans.
- 10.31(8) Change in Control Agreement between Aspen Technology, Inc. and Lawrence B. Evans dated August 12, 1997.
- 10.32(8) Change in Control Agreement between Aspen Technology, Inc. and David McQuillin dated August 12, 1997.
- 10.33(10) Change in Control Agreement between Aspen Technology, Inc. and Helen Moye dated September 1, 2000.
- 10.34(10) Change in Control Agreement between Aspen Technology, Inc. and Michael Muscatello dated August 1, 2000.
- 10.35(8) Change in Control Agreement between Aspen Technology, Inc. and Mary A. Palermo dated August 12, 1997.
- 10.36(11) Change in Control Agreement between Aspen Technology, Inc. and Lisa W. Zappala dated November 3, 1998.
- 10.37(10) Financing Partner Agreement between Aspen Technology, Inc. and IBM Credit Corporation dated June 15, 2000.
- 10.38 Rider No. 2, dated September 4, 2001, to Vendor Program Agreement between Aspen Technology, Inc. and General Electric Capital Corporation.
- 21.1 Subsidiaries of Aspen Technology, Inc.
- 23.1 Consent of Arthur Andersen LLP.
- 24.1 Power of Attorney (included in signature page to Form 10-K).

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1. Previously filed as an exhibit to the Current Report on Form 8-K of Aspen Technology, Inc. dated March 12, 1998 (filed on March 27, 1998), and incorporated herein by reference.
  2. Previously filed as an exhibit to the Registration Statement on Form 8-A of Aspen Technology, Inc., as amended by Amendment No. 1 thereto (filed on June 12, 1998), and incorporated herein by reference.
  3. Previously filed as an exhibit to the Current Report on Form 8-K of Aspen Technology, Inc. dated June 17, 1998 (filed on June 19, 1998), and incorporated herein by reference.
  4. Previously filed as an exhibit to the Registration Statement on Form S-1 of Aspen Technology, Inc. (Registration No. 33-83916) (filed on September 13, 1994), and incorporated herein by reference.

5. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-11651) (filed on September 9, 1996), and incorporated herein by reference.
6. Previously filed as an exhibit to the Registration Statement on Form S-1 of Aspen Technology, Inc. (Registration No. 33-88734) (filed on January 29, 1995), and incorporated herein by reference.
7. Previously filed as an exhibit to the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 1996, and incorporated herein by reference.
8. Previously filed as an exhibit to the Annual Report on Form 10-K for the fiscal year ended June 30, 1997, and incorporated herein by reference.
9. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-44575) (filed on January 20, 1998), and incorporated herein by reference.
10. Previously filed as an exhibit to the Annual Report on Form 10-K for the fiscal year ended June 30, 2000, and incorporated herein by reference.
11. Previously filed as an exhibit to the Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1998, and incorporated herein by reference.
12. Previously filed as an exhibit to the Definitive Proxy Statement on Schedule 14A of Aspen Technology, Inc. filed November 13, 2000, and incorporated herein by reference.
13. Previously filed as an exhibit to the Registration Statement on Form S-8 of Aspen Technology, Inc. (Registration No. 333-42536) (filed on July 28, 2000), and incorporated herein by reference.
14. Previously filed as exhibit 10.3 to the Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2000, and incorporated herein by reference.
15. Previously filed as an exhibit to the Registration Statement on Form S-3 of Aspen Technology, Inc. (Registration No. 333-63208) (filed on June 15, 2001), and incorporated herein by reference.
16. Previously filed as an exhibit to the Registration Statement on Form S-3 of Aspen Technology, Inc. (Registration No. 333-47694) (filed on October 10, 2000), and incorporated herein by reference.

† Confidential treatment requested as to certain portions.