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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

AMENDMENT NO. 1 TO

FORM 10-K/A

(MARK ONE)
[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR ENDED JUNE 30, 1999
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: 000-24786

ASPEN TECHNOLOGY, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	04-2739697
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(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, $.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 [X] 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. [X]

As of September 20, 1999, the aggregate market value of Common Stock (the only outstanding class of common equity of the registrant) held by nonaffiliates of the registrant was $249,425,489 , based on a total of 24,041,011 shares of Common Stock held by nonaffiliates and on a closing price of $10.375 for the Common Stock as reported on the Nasdaq National Market.

As of September 20, 1999, 25,174,385 shares of Common Stock were outstanding.

The undersigned registrant hereby amends the following item of its Annual Report on Form 10-K for the fiscal year ended June 30, 1999, as filed by the registrant on September 28, 1999, as set forth in the pages attached hereto:

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INTRODUCTORY NOTE

This Amendment No. 1 on Form 10-K/A amends the registrant's Annual Report on Form 10-K for the fiscal year ended June 30, 1999, as filed by the registrant on September 28, 1999, and is being filed principally to reflect changes in the name of one of the registrant's software products and in the lists of platforms on which several of the registrant's software products can operate. All of the changes are set forth under the headings "Item 1. Business -- Software and Service Solution -- Focused Solutions."

This Amendment on Form 10-K/A 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. 1A. Risk Factors" in the Form 10-K amended hereby. 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 Amendment on Form 10-K/A. 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 the leading supplier of software and service solutions used by companies in the process industries to design, operate and manage their manufacturing enterprises. The process industries include manufacturers of petroleum products, petrochemicals, polymers, specialty chemicals, pharmaceuticals, pulp and paper, electric power, food and beverages, consumer products, metals and minerals and semiconductors. We offer a comprehensive set of focused solutions, integrated plant-wide solutions and enterprise optimization solutions that help process manufacturers enhance profitability by improving efficiency, productivity, capacity utilization, safety and environmental compliance throughout the entire manufacturing life-cycle, from research and development to engineering, planning and scheduling, procurement, production and distribution. In addition to our software solutions, we offer systems implementation, advanced process control, real-time optimization and other consulting services through our staff of more than 460 project engineers. As part of our strategy to offer the broadest, most integrated suite of process manufacturing enterprise optimization solutions, we have acquired businesses from time to time to obtain technologies and expertise that complement or enhance its core solutions. We currently have more than 1,000 customers worldwide, including 46 of the 50 largest chemical companies, 22 of the 25 largest petroleum refiners and 16 of the 20 largest pharmaceutical companies.

INDUSTRY BACKGROUND

Companies in the process industries manufacture products in the form of bulk solids, liquids, gases, powders, and films by using production methods involving chemical reactions, combustion, mixing, separation, heating, cooling and similar processes. The process industries encompass manufacturers of petroleum products, petrochemicals, polymers, specialty chemicals, pharmaceuticals, pulp and paper, electric power, food and beverages, consumer products, metals and minerals and semiconductors. Companies in a number of other industries, also utilize production techniques with characteristics similar to those underlying process manufacturing.

In recent years, companies in the process industries have faced several challenges, which have placed increased pressure on their profitability. These challenges include intensifying global competition, growth, fluctuating commodity prices, and more stringent environmental and safety regulations. The industry has responded to these challenges in several ways. First, they have rationalized and globalized their production processes through acquisitions, divestitures, mergers and joint ventures. Second, they have reduced their overhead expenses by re-engineering the work processes that support their business and downsizing their supporting organizations. Third, they have invested in information technology to support reengineered business processes.

The profitability of these companies depends substantially upon the costs of raw materials, energy and capital; accordingly, the management and utilization of these inputs significantly affect the companies' financial results. Unlike labor-intensive businesses, which can materially change the scale of their business operations by adjusting the sizes of their labor forces, process manufacturers must focus on improving their production methods in order to increase output, lower costs and reduce waste. Because of the large volumes typically produced by process manufacturers, even a relatively small reduction in raw material or energy requirements or a relatively small improvement in throughput or product yields can have a dramatic impact on the profitability of the manufacturing process.

Improvement of production methods in the process industries requires a thorough understanding of chemical engineering analysis, the fundamental discipline underlying the manufacturing processes. Due to the number of variables involved, chemical engineering analysis is complex and calculation intensive. Because of this complexity and because many process manufacturers have significantly reduced their engineering staffs, many process manufacturers are seeking technology-based solutions to aid them in their process manufacturing decisions, with the objective of moving toward optimization of their production processes and manufacturing enterprises under existing process and equipment constraints.

Increasingly sophisticated process manufacturing optimization solutions have been introduced to assist process manufacturers in optimizing the design, operation and management of their manufacturing processes and to help them coordinate and optimize multiple manufacturing facilities across their enterprise. In designing manufacturing processes, engineers use tools on desktop computers to simulate a new or existing process and to optimize tradeoffs between variables such as capital investment and operating costs. During operation of the manufacturing process, plant operators rely on automation systems installed in the plant to control and optimize the manufacturing process by, for example, accepting a lower yield to increase overall throughput. To manage the production process, plant managers use information systems to perform tasks such as planning and scheduling of production, analysis and reporting of performance, and yield accounting. To optimize multiple manufacturing facilities planners use supply chain management systems that help them optimize and manage their production facilities throughout the enterprise. Although early versions of process manufacturing optimization solutions were limited in scope and complicated to use, the availability of increasingly powerful, affordable computers and networks and sophisticated intuitive graphical user interfaces has expanded the capabilities of the solutions and the market of potential users.

Process manufacturing optimization solutions include applications to address a broad range of manufacturing activities, including the following:

DESIGN	OPERATE	MANAGE
Process Modeling	Advanced Process Control	Process Information Management
Design Analysis & Optimization	Real-time Optimization	Production Scheduling & Planning
Process Improvements	Operator Training	Quality Assurance
Plant Retrofits		Supply Chain Management
		Environmental, Health & Safety Compliance

Many process manufacturers have implemented solutions to automate processes outside the actual methods of production. For many years, companies in the process industries have sought to control their production processes by deploying distributed control systems, or DCS, which use computer hardware systems, communication networks and industrial instruments to measure, record and automatically control process variables during production. More recently, process manufacturers have automated key business processes through the implementation of enterprise resource planning, or ERP, solutions that enhance their ability to manage resources across the enterprise and enable them to integrate front- and back-office business functions. DCS and ERP solutions generally do not, however, incorporate the detailed chemical engineering knowledge of the manufacturing process or data on the performance of the plant either to optimize the operation and management of the production process, or manage relationships with suppliers and customers.

Process manufacturers are increasingly seeking a complete, integrated family of process manufacturing optimization software products and services that can be used to improve their efficiency and productivity throughout the entire manufacturing life-cycle, while at the same time establishing links with the process manufacturers' existing DCS and ERP solutions and with their customers and suppliers.

THE ASPENTECH ADVANTAGE

We are the leading supplier of software and service solutions that enable companies in the process industries to optimize the design, operation and management of their manufacturing processes and business enterprises. Our comprehensive suite of solutions helps process manufacturers enhance profitability by improving efficiency, productivity, capacity utilization, safety and environmental compliance throughout the entire manufacturing life-cycle. We believe our customers increasingly view their investments in our solutions as strategic because of the substantial potential economic benefits these solutions offer and the broad range of production issues they address. Our competitive advantage is based on the following key attributes:

TECHNOLOGY LEADERSHIP. We believe we are the technology leader among providers of process manufacturing optimization solutions. We have achieved this technology leadership through internal research and development, strategic acquisitions, and partnerships. For example, we obtained the leading advanced process control and optimization technologies through our acquisitions of Dynamic Matrix Control Corporation and

Setpoint, Inc. in 1996. In 1997, we introduced Batch Plus, a commercialized version of recipe-based simulation functionality developed in collaboration with Merck & Co., Inc. We have integrated acquired technologies with existing products in order to offer solutions that include the best features and functionality of both. Moreover, we have designed our software solutions to operate on all major operating system platforms used by process manufacturers and to be compatible with all major distributed control systems.

BROADEST SUITE OF INTEGRATED SOLUTIONS. We believe our solutions represent the most complete suite of integrated software and services available for the design, operation and management of manufacturing processes in the process industries. Process manufacturers are able to use our solutions across every stage of the manufacturing life-cycle, from research and development to engineering, planning and scheduling, procurement, production and distribution. We are continuing to integrate our software products in order to further increase the ability of our customers to share models and data across our different software solutions. In October 1997, we announced the introduction of Plantelligence, the name for our integrated suite of plant-wide best-in-class products. Plantelligence is based on the Aspen Framework, software which serves as a base for integrating our products so they work together in ways that support specific business processes such as production planning or purchasing raw material feedstocks. Plantelligence is being further developed to permit, for example, a buyer for a petroleum refinery to determine how much it will cost to refine a specific boatload of crude oil under then-current operating conditions. This information can then be used to help the buyer decide whether it is economically desirable to purchase that crude oil at then-prevailing prices. The buyer can perform these analyses using a single graphical user interface, without needing to understand our individual software solutions used to perform the analysis. In August 1999, we announced the successful completion of a technically complex Plantelligence implementation at Equistar's Matagorda County, Texas facility.

UNPARALLELED PROCESS INDUSTRY EXPERTISE. Over the past 18 years, we have established a reputation as a leading source of process manufacturing enterprise optimization expertise. Our significant base of chemical engineering and process manufacturing experience and knowledge serves as the foundation for the proprietary solution methods, physical property models and data estimation techniques embodied in our software solutions. We have enhanced our knowledge and understanding of process manufacturing optimization solutions over time through extensive interaction with our customers, which have performed millions of simulations using our software. These customer relationships have also enabled us to identify and develop or acquire solutions that best meet the needs of our customers. To complement our software expertise, we have assembled a staff of more than 460 project engineers to provide implementation, advanced process control, real-time optimization and other consulting services to our customers. We believe our large engineering team provides an important source of competitive differentiation.

LARGE INSTALLED CUSTOMER BASE. We currently have more than 1,000 customers worldwide, including 46 of the 50 largest chemical companies, 22 of the 25 largest petroleum refiners and 16 of the 20 largest pharmaceutical companies. We also have leading customers in other vertical markets such as consumer products, electric power, pulp and paper, metals and minerals and semiconductors. In addition, all of the leading engineering and construction firms use our design software. We consider our relationships with our existing customers to be an important competitive advantage.

STRATEGY

Our principal objective is to extend our leadership in providing enterprise optimization solutions for process manufacturers that allow them to optimize the design, operation and management of their manufacturing processes and enterprises. The industries we serve produce products that touch people every day, such as the gasoline that fuels automobiles, the clothes people wear, and the medicines that improve people's health. By helping process manufacturers optimize their enterprises we believe we can help improve the quality of some of these basic products in a way that preserves the environment and makes these products

available to greater numbers of people worldwide. Our strategy to achieve these objectives includes the following key elements:

MAINTAIN OUR LEADERSHIP POSITION IN FOCUSED TECHNOLOGIES. We believe that we offer the most technologically advanced solutions available for the design, operation and management of manufacturing processes, particularly in the areas of process simulation, advanced process control, real-time optimization, scheduling and planning, process information management and supply chain management. In order to extend the technological leadership of our individual software solutions, we intend to continue to recruit and develop outstanding technical talent, to focus on understanding customer needs, to keep abreast of technological advances in software and communications and engineering, and to focus on creating products that are easy to use. We will continue to invest in research and development and to prioritize product development in accordance with market needs and with our strategy. From time to time we may pursue strategic acquisitions of complementary technologies and expertise. We believe that the use of our individual software solutions in recent years has provided process manufacturers with increased evidence of the economic benefits that may be obtained from implementation of these focused solutions.

PROVIDE INTEGRATED PLANT-WIDE SOLUTIONS AND ENTERPRISE OPTIMIZATION. We believe that process manufacturers can derive substantial additional value through the integration of our focused solutions. Our strategy is to integrate our focused solutions to support business processes that cut across many disciplines both within the plant and across the manufacturing enterprise. In many situations business processes involve multiple uses of our focused solutions. For example, in a specialty chemical plant one of the business processes is to create the production schedule for the coming week. This business process might involve the our supply chain management products to solve the scheduling problem, and our simulation and production accounting technologies to generate data about the status of inventories. By integrating these technologies and using consistent data and models the planner can perform the business process more efficiently and accurately without an in-depth understanding of each of the supporting focused solutions. We believe that integrated solutions provide value for customers in many ways, including improving human performance, improving plant performance, increasing product quality and lowering information technology costs. We continue to invest in the integration of our products. Specifically, one development effort, the Aspen Framework, is designed to integrate all of our products. The Aspen Framework is based on Microsoft Distributed InterNet Architecture, or DNA. We believe we are well positioned to offer integrated solutions because we own many of the leading technologies in the industry and can therefore make the required changes in each of these products needed to achieve an integrated solution.

CONTINUE THE DEVELOPMENT AND IMPLEMENTATION OF THE ASPEN FRAMEWORK. We plan to continue to develop and implement the Aspen Framework as the backbone of our Plantelligence solution. The Aspen Framework enables integration between a plant's enterprise resource planning system, our products and existing plant software systems. The Aspen Framework is built on the Microsoft DNA and simplifies the deployment of complex solutions by integrating a plant's manufacturing and business processes. As customers increasingly demand integration of their technology to support integrated business and manufacturing processes, the Aspen Framework will be available as the technology base to enable this integration.

FOCUS ON OUR CORE VERTICAL MARKETS. We believe that our customers' needs vary significantly across vertical industries. In order to achieve the full benefits of our focused and integrated solutions, we believe that we will need to offer solutions that are tailored to the needs of our customers within specific vertical industries. In December 1998 we created four industry business units to facilitate the creation of vertically-focused solutions for several of the markets we serve. These industry business units will focus on refining, chemicals and petrochemicals, polymers, and life sciences and specialty chemicals. Our strategy is to define and deliver the integrated solution for each major vertical industry that we serve. We plan to create initial first-of-a-kind implementations of our integrated technologies and then refine and develop our strategy for penetrating each vertical market in conjunction with our partners. The implementation of our Plantelligence solution at Equistar's Matagorda County, Texas polymer production facility in August 1999 is an example of a first-of-a-kind implementation.

EXPAND OUR NETWORK OF PARTNERS. We plan to expand our network of partners to assist in the sale and implementation of our integrated plant solutions and enterprise optimization solutions. We expect this effort will include working with our customers, hardware vendors, complementary software vendors, business consultants, process licensors, engineering and construction firms, and systems integrators. We believe that these business partners will be helpful in developing, selling, implementing and maintaining our solutions. For example, we have entered into an alliance agreement with Equistar Chemicals, L.P., Lyondell Chemical Company, and BP Amoco, p.l.c. for enterprise optimization, a partnering agreement with Yokagawa Electric Corporation for the provision of optimization solutions to their customers, and collaboration and partnering agreements with OLI Systems, Refining Process Services, Inc., SRI Consulting and Intergraph Corporation for the provision of software solutions.

INCORPORATE THE INTERNET IN SOLUTION DEVELOPMENT, SALE AND DELIVERY. We believe that the Internet is an important component of the development, sale and delivery of our focused solutions, Plantelligence, and enterprise optimization solutions. Some of our software products, including the Aspen Framework, are already web-enabled, and a product development web initiative has been undertaken to direct the web-enablement of our solutions. A core part of our Internet strategy is the development of electronic commerce, or e-commerce, to market, sell and deliver our products over the Internet through our website and the websites of our partners and complementary technology providers. We currently offer customers the ability to download software patches from our website as part of customer support and we are developing additional on-line technical support as part of the enhancement of our customer support service. We believe that the Internet will enable our customers to use our technology on a collaborative basis within their own enterprise, and with their suppliers and customers, and are otherwise exploring new business models which may be made possible by the Internet.

SOFTWARE AND SERVICE SOLUTIONS

We offer a comprehensive suite of software and service solutions that enable process manufacturers to optimize their enterprises and the design, operation and management of their manufacturing processes. Our solutions capture process knowledge in consistent, accurate and reliable models that customers can use as the basis for decision-making across the entire manufacturing life-cycle and provide vital functionality for elements of the manufacturing process that other software applications, such as ERP and DCS software, do not address. A number of our software solutions can be linked with ERP solutions and DCS to improve a customer's ability to gather, analyze and use information across the entire process manufacturing life-cycle. To enable our customers to take full advantage of our software solutions, we also offer comprehensive expert consulting, training and support services. Our solutions can be grouped into three categories: focused solutions, integrated plant solutions and enterprise optimization solutions. Our strategy is to provide a migration path for our customers. So, for example, a customer can start with a single AspenTech focused solution, add additional focused solutions, integrate these solutions through our services and integrated products, and finally incorporate our supply chain solution and optimize their business processes to achieve enterprise optimization. This migration path provides a means by which each customer can implement and absorb technology and improve their business processes at their own rate in accordance with their own pressures and business environment. The following descriptions explain each of our three product categories in greater detail.

FOCUSED SOLUTIONS. We refer to our individual products and services as our focused solutions, which allow process manufacturers to improve specific aspects of the design, operation and management of their manufacturing enterprises. These products are the building blocks for our integrated plant solutions and enterprise optimization solutions. In many cases these technologies are the market leaders. The reputation of these products for quality and leading-edge technology has been a hallmark of our history. The following tables describe our principal focused software solutions and their applications for the design, operation and management of manufacturing enterprises:

DESIGN:

SOFTWARE SOLUTION	DESCRIPTION	APPLICATIONS
Aspen Plus.....	Rigorous steady-state modeling system for simulating chemical or petroleum based manufacturing processes involving vapors, liquids, solids and electrolytes with a library of equipment and physical property models.	Used to design processes, evaluate process changes and analyze "what-if" scenarios.
Aspen Dynamics/Aspen Custom Modeler....	Rigorous modeling system for simulating processes under changing (dynamic) conditions with a library of equipment and controller models.	Used to examine process operability, safety and control as operating parameters fluctuate during plant startup and shutdown and other transient conditions.
Batch Plus.....	Batch process modeling system for recipe-based processes.	Used to scale-up and design new processes, and to analyze the production of one batch or an entire batch plant.
Aspen Zyqad.....	System for integrating, automating and managing data, applications and activities in the engineering work process.	Used to integrate and automate work flow between engineers designing new process plants or improving existing facilities.

We also provide an integrated suite of process design and modeling technology, known as the Aspen Engineering Suite or AES. AES is comprised of eight of our products, including Aspen Plus and Aspen Zyqad.

Layered on top of these core, focused solutions are a number of separately licensed modules that focus on specialized types of analysis for modeling polymer processes, heat exchanger equipment, separation systems, batch distillation columns, adsorption processes and other complex systems. All of these process design software solutions can operate in Windows. Aspen Plus also runs on DEC VMS and UNIX.

We typically license our process design software solutions for a term of three to five years. The annual cost for a single user of one of our process design software solutions ranges from $10,000 to $30,000, depending on the solution, the license term and the number of licensed users. The license fee includes a separate maintenance component that covers customer support, upgrades, revisions and enhancements during the term of the license.

Implementation of our process design software solutions does not typically require substantial consulting services, although services may be provided for customized model designs and process synthesis.

OPERATION:

SOFTWARE SOLUTION	DESCRIPTION	APPLICATIONS
Aspen RT-Opt..	Real-time optimization system.	Used to identify optimal plant setpoints in order to maximize operating margins on a real-time basis.
Aspen IQ.....	Inferential sensor modeling and online implementation technology.	Used to infer infrequently measured properties from continuous measurements for environmental monitoring and advanced control.
DMCplus.....	Advanced process control system using multi-variable model-predictive control technology.	Used to tightly control actual plant operations at multiple operating constraints.
OTISS.....	System for developing operator training simulators.	Used to train operators to better manage daily plant operations and respond to abnormal situations.

Aspen RT-Opt operates on Windows, DEC VMS and UNIX. DMCplus operates on Windows, DEC VMS and UNIX. OTISS operates on UNIX, Hewlett-Packard and Sun Solaris.

We typically license our process operation software solutions for terms of 99 years. The list price for a 99-year license of Aspen RT-Opt or DMCplus generally ranges from $50,000 to $200,000, depending on the solution and on whether the license covers a single process unit or an entire facility. The list price for a 99-year license of OTISS is approximately $50,000. Maintenance of process operation software solutions is available under separate contracts.

Implementation of our process operation software solutions typically requires substantial consulting services.

MANAGEMENT:

SOFTWARE SOLUTION	DESCRIPTION	APPLICATIONS
InfoPlus.21.....	Process information management system with a real-time database of historical information.	Used to compare real-time and historical information generated by plant systems to present a unified view of plant operations.
Aspen MIMI.....	Supply chain management system, including demand management, inventory control and available-to-promise.	Used to identify best supply chain decisions to maximize asset utilization, minimize raw material costs, maximize product values and control inventories.
Aspen PIMS.....	Linear programming-based economic planning and scheduling system.	Used to identify short-term and strategic decisions on feedstock purchases, capacity utilization and production planning.
Aspen Advisor....	Yield-accounting solution.	Used to track inventory and material movements into, through and out of processing plants, in order to enable manufacturers to report production data accurately to ERP and other business systems.
1stQuality.....	System to address issues in polymer manufacturing.	Used to integrate the management, usage and monitoring of operating conditions to reduce transition time, improve product consistency and monitor process compliance.

All of our process management software solutions can operate in Windows.

We typically license InfoPlus.21, MIMI, Aspen Advisor and 1stQuality for terms of 99 years and typically license Aspen PIMS for a term of 5 years or 25 years. The list price for an entry-level 99-year InfoPlus.21 license is approximately $40,000 and varies depending on the number of points of data being collected. The list price for an entry-level 99-year multi-user site license for Aspen MIMI is approximately $220,000. The list price for a license of Aspen PIMS modules ranges from $10,000 to $200,000, depending on the solution and the license term. The list price for an entry-level 99-year Aspen Advisor license ranges from $100,000 to $200,000, depending on the number of nodes, and the list price for an entry-level 99-year 1stQuality license is approximately $150,000 per plant.

Implementation of our process management software solutions typically requires consulting services, although not to the same extent as process operation software solutions.

INTEGRATED PLANT SOLUTIONS. Our suite of integrated plant solutions, which are marketed under the Plantelligence name, enables process manufacturers to drive their plant operations to higher levels of profitability. Plantelligence incorporates our focused solutions, and uses the Aspen Framework as a vehicle for integrating these products so they work together to support specific business processes. The Aspen Framework facilitates integration of our products by allowing the various applications to communicate with common databases of design information, real-time information and documents. The Aspen Framework is based on Microsoft DNA technology and includes web-enabled features such as XML and Active Server pages. Plantelligence is designed to integrate with a plant's hardware systems, enterprise resource planning system, and existing information technology systems to optimize operation of the plant.

By uniting our products in a common framework, Plantelligence provides a comprehensive set of business improvements to process plants. We believe the benefits of integration are an essential part of helping process manufacturers become more competitive. Integration of the focused technologies enables process manufacturers to integrate the design, operation and management of their process plants. Integrating the technologies which support business processes can help process manufacturers align their people, their resources, and their business processes to drive their manufacturing enterprises to higher levels of productivity and overall performance. The value of this integration is enhance through the ability of different technology products to share the model of the manufacturing process. By running plants on consistent models that reflect true economic, chemical and physical constraints, manufacturers obtain the critical knowledge they need to develop, execute and evaluate their manufacturing plan and make improvements with each production cycle.

ENTERPRISE OPTIMIZATION. Our enterprise optimization solutions build on Plantelligence with the addition of our supply chain technology and management of changed business processes. We believe customers can run their enterprises more efficiently and effectively by utilizing our integrated technologies to tightly link their manufacturing operations to the management of their business with their suppliers and customers. Our enterprise optimization solutions enable customers with a wide array of manufacturing plants and assets to coordinate their operations and enable their plants to work together toward common operating and business goals.

In many cases manufacturing facilities have been overlooked as companies pursued large business process reengineering projects over the last decade. To a large extent, the manufacturing plants continue to act as silos that maximize their own efficiency and productivity. However, as the process industries become increasingly global and interconnected, we believe that process manufacturers will need to change their business processes at the plant so that they can optimize their entire manufacturing enterprise rather than the specific plants that comprise their enterprise. Our enterprise optimization solutions are designed to enable process manufacturers to adapt to rapid changes in demand and their business environment, to respond quickly to these changes, act as a single enterprise, optimize use of resources, meet customer requirements and operate more profitably.

CONSULTING SERVICES. We offer implementation, advanced process control, real-time optimization and other consulting services in order to provide our customers with complete solutions. Customers can frequently use our focused process design software solutions without assistance from us or our partners. However, many of the projects in which customers deploy our focused process operation software solutions and process management software solutions are sufficiently complex that customers require assistance from us and our

partners in order to take full advantage of the benefits of those solutions. Our integrated plant solutions and enterprise optimization solutions also require assistance from us and our partners.

Customers that obtain consulting services from us typically engage us to provide such services over periods of between 1 day and 24 months. We generally charge customers for consulting services on a fixed-price basis, but charge customers for certain services, primarily on-site advanced process control and optimization services, on a time-and-materials basis.

We employ a staff of more than 460 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 ranging from 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 to support our process management software solutions and to provide complementary services.

ACQUISITIONS OF SOFTWARE AND SERVICE SOLUTIONS. As part of our strategy to offer the broadest, most integrated suite of software and service solutions for the design, operation and management of manufacturing processes, from time to time we acquire businesses to obtain technologies and expertise that complement or enhance our core solutions. We typically combine acquired technologies with our pre-existing products in order to offer solutions that include the best features and functionality of both. We provide an upward migration path and support for any discontinued products.

We have completed 17 acquisitions that have provided us with, or significantly enhanced, our capabilities in the areas of process information management, advanced process control and optimization, advanced planning and scheduling, and supply chain management. We have successfully integrated the operations of these acquired businesses. The following table describes AspenTech's acquisitions to date:

BUSINESS ACQUIRED	DATE ACQUIRED	SOLUTION ACQUIRED OR ENHANCED
Prosys Technology Limited.....	October 16, 1991	SPEEDUP
Industrial Systems, Inc.....	May 25, 1995	Components of InfoPlus.21
Dynamic Matrix Control Corporation.....	January 5, 1996	Components of DMCplus and Aspen RT-Opt
Setpoint, Inc.....	February 9, 1996	Components of DMCplus, Aspen RT-Opt and InfoPlus.21
B-JAC International, Inc.....	October 1, 1996	Heat exchanger modeler
Process Control Division of Cambridge Control Limited.....	October 8, 1996	Consulting service capabilities for advanced process control and optimization
Basil Joffe Associates, Inc. and PIMS division of Bechtel Corporation.....	December 31, 1996	Aspen PIMS
NeuralWare, Inc.....	August 27, 1997	Neural network technology and tools integrated with Aspen Plus, DMCplus and InfoPlus.21
The SAST Corporation Limited.....	August 28, 1997	OTISS and consulting service capabilities

BUSINESS ACQUIRED	DATE ACQUIRED	SOLUTION ACQUIRED OR ENHANCED
Cimtech S.A./N.V.	February 27, 1998	Components of InfoPlus.21
Contas Process Control S.r.L.	February 27, 1998	Consulting service capabilities for advanced process control and optimization
IISYS, Inc.	March 6, 1998	Aspen ADVISOR
Zyqad Limited	March 16, 1998	Aspen Zyqad
Chesapeake Decision Sciences, Inc.	May 27, 1998	Aspen MIMI
Treiber Controls, Inc.	May 29, 1998	Software and consulting service capabilities for advanced process control and optimization
Process Optimization and Emissions Monitoring Division of Callidus Technologies, Inc.	September 14, 1998	Consulting services capabilities for process optimization and predictive emissions monitoring
Syllogistics, Inc.	October 14, 1998	Logistics management software

TECHNOLOGY AND PRODUCT DEVELOPMENT

Our software and services solutions combine three of our core competencies: our sophisticated modeling capabilities based on fundamental chemical engineering principles, our extensive experience with a broad variety of manufacturing processes in the chemicals, petrochemicals, petroleum, pharmaceuticals, and other industries, and our understanding of how to optimize and streamline key business processes in these same industries. Our technology enables customers to optimize the business processes involved in three main value chains: process innovation, supply chain, and manufacturing operations.

To deliver business process optimization software we focus our product development in three areas. First, we build software that enables our customers to model and manage their manufacturing process. We support sophisticated empirical models generated from advanced mathematical algorithms developed by our employees. In addition, we support rigorous models of chemical manufacturing process and the equipment used in those manufacturing processes. We believe that the development and refinement of highly accurate empirical and rigorous models such as those developed by us require a deep understanding both of the fundamental chemistry underlying the manufacturing process and the technology of modeling. Our models employ advanced mathematical algorithms developed by our employees and others, such as the dynamic matrix control algorithm for multi-variable, model-based predictive control and the inside-out algorithm for simulating distillation. 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. Second, we develop software which models key customer work processes and automates the workflow of these processes. This software integrates our broad product line such that the data used in the work process is seamlessly passed between the applications used in each step of the business process. In addition, we have a unique user interface that intuitively guides the user through the business process. Third, we are investing significantly in supply chain and data management software. This software embeds sophisticated optimization technology allowing customers to optimize their entire corporate supply chain and manufacturing activities. In addition, this software embeds key knowledge about the details of how manufacturing and supply chain operations in the process industry function.

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 interface. As of June 30, 1999, we employed a product development staff of more than 290 persons.

CUSTOMERS

Our software solutions are installed at more than 1,000 customers worldwide. The following table sets forth a selection of our customers, whose agreements with us produced at least $250,000 in fees to AspenTech in fiscal 1998 or 1999:

CHEMICALS AND PETROCHEMICALS
Air Products & Chemicals, Inc.
Allied Signal, Inc.
BASF AG
Bridgestone/Firestone, Inc.
Borealis Exploration Limited
Celanese
Condea Vista Company
DSM N.V.
The Dow Chemical Company
E.I. du Pont de Nemours & Company, Inc.
Elf Atochem
Equistar Chemicals LP
Formosa Petrochemical Corp.
Huntsman Corporation
Kuraray Co., Ltd.
Messer Griesheim GmbH
Mitsubishi Chemical Corporation
Mitsui Chemicals
Nova Chemicals, Ltd.
PCS Systemtechnik GmbH
Reliance Industries Ltd.
Repsol S.A.
Sasol Industries (Pty.) Ltd.
Shell International Chemie Mij B.V.
Sinopec
Union Carbide Chemicals and Plastics Company, Inc
Westlake Management Services Corporation

LIFE SCIENCES AND SPECIALTY CHEMICALS
AstraZeneca
Aventis Research & Technologies
Bayer Corporation
Cabot Corporation
E.I. du Pont de Nemours & Company, Inc.
Eli Lilly
Engelhard Corporation
Genentech, Inc.
Hercules, Inc.
Hoffman-LaRoche, Inc.
Imperial Chemical Industries plc
Merck & Co., Inc.
Novartis Pharma A.G.
Owens Corning
SmithKline Beecham Pharmaceutical
UCB Chemicals

REFINING, OIL AND GAS
AB OMV
Abu Dhabi National Oil Company
Agip Petroli S.p.A.
Amoco Corporation
Arco Products Company
Bharat Petroleum co. Ltd.
BP Amoco plc
Chevron Corporation
Citgo Petroleum Corporation
Conoco Inc
Equilon Enterprises LLC
Exxon Company U.S.A.
Kuwaiti National Petroleum Company
Lyondell Citgo Refining Company Ltd.
Magyar Olaj LS
Mobil Oil Corporation
Motiva Enterprises LLC
Pemex Gas y Petroquimica Basica
Petroleos de Venezuela, S.A.
Phillips Petroleum Company
Repsol Petroleo SA
Shell Oil Company
Star Enterprise
Statoil
Sunoco Inc.
Total-Fina
Valero Refining Company

CPG AND FOODS AND BEVERAGES
Ben & Jerry's Homemade, Inc.
Cargill, Incorporated
General Mills, Inc.
Nestle S.A.
Procter & Gamble
Unilever plc

SEMICONDUCTORS
Mitsubishi Silicon America
Motorola, Inc.
Rockwell Semiconductor Systems
Vishay Silconix

METALS AND MINERALS
Alcoa of Australia, Ltd.
Gulf States Steel, Inc.
LTV Corporation
Nippon Steel Chemical Co., Ltd.
Sollac S.A.
Wabash Alloys

ENGINEERING AND CONSTRUCTION
ABB Lummus
Bechtel Group
Chiyoda Corporation
Fluor Corporation
Foster Wheeler Corporation
Jacobs Engineering Group Inc.
Johnson Matthey plc
Kellogg Brown & Root/Halliburton
Kvaerner E & C
Linde AG
Lurgi AG
Raytheon Engineers & Constructors
Snamprogetti SpA
Technip Italy SpA

PULP AND PAPER
Buckeye Cellulose Corporation
Weyerhaeuser
Consolidated Papers, Inc.

POWER AND NUCLEAR
ABB Group
Electrabel SA/NV
Electricite de France
The SGN Group
Westinghouse Electric Corporation

For fiscal 1997, 1998 and 1999, international revenues accounted for approximately 50.0% 45.4%, and 53.4 %, respectively, of our total revenues. No individual customer represented more than 10% of our total revenues in fiscal 1997, 1998 or 1999. There can be no assurance that any of the customers listed above will continue to license software or purchase services from us beyond the term of any existing agreement.

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 targets our principal sales efforts at senior management levels, including chief executive officers and senior decision-makers in manufacturing, operations and technology.

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 have appointed a single sales account manager to be responsible for our relationship with each customer. In order to market the specific functionality and other complex technical features of our software solutions, each sales account manager leads a specialized team 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 the customer's plant engineers who would be the ultimate users of our solutions. 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 believe that our seasoned direct sales force, consisting of more than 100 individuals as of June 30, 1999, and our ability to sell at senior levels within customer organizations are important competitive advantages. We have established direct sales offices in key geographic areas where there are high concentrations of potential business, including New Jersey, Texas, 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.

We also 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. The AspenWorld 97 conference, held in

October 1997, attracted more than 1,400 participants. The AspenWorld 2000 conference has been scheduled to be held in February 2000.

We also license our software solutions at a substantial discount to universities that agree to use its 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 550 universities use our software solutions in undergraduate instruction.

COMPETITION

We face three primary sources of competition: commercial vendors of software products for one or more elements in the design, operation and management of manufacturing processes; vendors of hardware that offer software solutions in order to add value to their proprietary distributed control system; and large companies in the process industries that have developed their own proprietary software solutions. We believe that suppliers of individual software solutions are under intensifying pressure to offer integrated functionality beyond their traditional applications and that, at the same time, process manufacturers are increasingly concluding that it is no longer efficient or economical for them to continue to develop or support internally developed software. Certain competitors also supply related hardware products to our existing and potential customers and may have established relationships that afford those competitors an advantage in supplying software and services to those customers. We believe, however, that customers prefer to select best-in-class software solutions, independent of their selection of underlying industrial automation hardware platforms. We do not offer our solutions with any particular hardware and we design our software products to operate effectively on systems manufactured by all major hardware vendors. As the market for manufacturing enterprise optimization solutions consolidates further, we believe that our exclusive focus on developing and marketing best-in-class software and services will continue to provide a competitive advantage.

Because of the breadth of its software and service offerings, we face competition from different vendors depending on the solution in question. We compete with respect to the largest number of its solutions with Simulation Sciences, Inc., a subsidiary of Invensys plc. With respect to particular software solutions, we also compete with Chemstations, Inc., AEA Technology Engineering Software (a subsidiary of AEA Technology plc), OSI Software, Inc., The Foxboro Company and Wonderware Corporation (both of which are subsidiaries of Invensys plc), the Simcon division of ABB Asea Brown Boveri (Holding) Ltd., and several smaller competitors, such as Pavilion Technologies, Inc. With respect to its supply chain management solutions we compete with vendors such as i2 Technologies, Inc. and Manugistics Group, Inc.

A number of vendors of ERP software products, such as Baan Company N.V., J.D. Edwards Inc., Oracle Corporation, PeopleSoft, Inc. and SAP A.G., are expanding their presence in the market for supply chain management solutions via internal research and development, acquisitions and sales and marketing agreements with independent vendors of supply chain management solutions. We expect to encounter increasing competition from these companies and from DCS vendors, such as Honeywell Inc., as they expand their software and service offerings to include additional aspects of process manufacturing.

In recent years, there has been consolidation in the markets in which we compete that has expanded the breadth of product and service offerings by certain of our competitors, such as the acquisitions by Invensys plc of Simulation Sciences, Inc. the Foxboro Company and Wonderware Corporation. As a result of this consolidation and the expansion of DCS and ERP vendors into additional markets, we may compete from time to time with divisions of companies with which we collaborate on other occasions, such as Honeywell Inc. and Invensys plc. There can be no assurance that our efforts to compete and cooperate simultaneously with these or other companies will be successful. The further consolidation of existing competitors or the emergence of new competitors could have a material adverse effect on our business, operating results and financial condition.

Our continued success depends on our ability to compete effectively with our commercial competitors and to persuade our prospective customers to use our products and services instead of, or in addition to, software developed internally or services provided by their own personnel. In light of these factors, there can be no assurance that we will be able to maintain our competitive position.

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 United States patents for the expert guidance system in our proprietary graphical user interface, the simulation and optimization methods in our optimization software, a process flow diagram generator in our planning and scheduling software, and a process simulation apparatus in our polymers software. We have registered or applied to register certain 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 certain products to customers solely for the purpose of special customization of the products and have deposited copies of the source code for certain products in third-party escrow accounts as security for on-going service and license obligations. In these cases, we rely on nondisclosure and other contractual provisions to protect our proprietary rights.

The laws of certain 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. The laws of many countries in which we license our products protect trademarks solely on the basis of registration. We currently possesses a limited number of trademark registrations in certain foreign jurisdictions and do not possess, and have not applied for, any foreign copyright or patent registrations. In fiscal 1997, 1998 and 1999, we derived approximately 50.0%, 45.4% and 53.4% of our total revenues, respectively, from customers outside the United States.

There can be no assurance that the steps taken by us to protect our proprietary rights will 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 such misappropriation of our technology or development of competitive technologies could have a material adverse effect on our business, operating results and financial condition. 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 us. In such an event, we may be required to incur significant costs in litigating a resolution to the asserted claims. There can be no assurance that such a resolution would not 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 or, if such a license is required, that it will be available on terms acceptable to the Company.

We believe that, due to the rapid pace of innovation within the industry, factors such as the technological and creative expertise of our personnel, the quality of our products, the quality of our technical support and training courses, and the frequency of software product enhancements are more important to establishing and maintaining a technology leadership position within the industry than the various legal protections for our software products and technology. See "Item 1A. Risk Factors -- Dependence on Proprietary Technology."

EMPLOYEES

As of June 30, 1999, we had a total of 1,448 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.

While we substantially expanded the breadth and depth of our management team in recent years, our future success depends to a significant extent on the continued service of Lawrence B. Evans, the principal founder of AspenTech and our Chairman and Chief Executive Officer, our other executive officers, and certain engineering, technical, managerial, sales and marketing personnel. We believe that our future success will also depend on our continuing ability to attract, motivate and retain additional highly skilled engineering, technical, managerial and marketing personnel. Competition for such personnel is intense, and there can be no assurance that we will be successful in attracting, assimilating and retaining the personnel we require to continue to grow and operate profitably.

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 October 4, 1999.

ASPEN TECHNOLOGY, INC.

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

POWER OF ATTORNEY

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 October 4, 1998.

SIGNATURE	TITLE
/s/ LAWRENCE B. EVANS Lawrence B. Evans	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
* Lisa W. Zappala	Chief Financial Officer (Principal Financial and Accounting Officer)
* Joseph F. Boston	Director
* Gresham T. Brebach, Jr.	Director
* Douglas R. Brown	Director
* Joan C. McArdle	Director
* Alison Ross	Director

*By: /s/ LAWRENCE B. EVANS
Lawrence B. Evans
Attorney-in-Fact