FORM 10-K

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [FEE REQUIRED]				
For the Fiscal Year Ended: September 30, 1995				
OR				
[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]				
For the transition period from to				
Commission File Number: 0-11412				
AMTECH SYSTEMS, INC.				
(exact name of Registrant as specified in its charter)				
Arizona 86-0411215				
(State or other jurisdiction of incorporation or organization) Identification N				
131 South Clark Drive, Tempe, Arizona 85281	-			
(Address of Principal Executive Offices) (Zip Co	ode)			
Registrant's telephone number, including area code: 602-967-5146				
Securities registered pursuant to Section 12(b) of the Act: None				
Securities registered pursuant to Section 12(g) of the Act:				
Common Stock, \$.01 Par Value				
(Title of Class)				
Redeemable Public Warrant				
(Title of Class)				

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 twelve (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 ninety (90) days.

[X] 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 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.

[] Yes [X] No

State the aggregate market value of the voting stock held by nonaffiliates of the Registrant. The aggregate market value shall be computed by reference to the price at which the stock was sold, or the average bid and asked prices of such stock, as of a specified date within sixty (60) days prior to the date of filing. (See definition of affiliate in Rule 405, 17 CFR 230.405).

\$15,804,706 as of December 8, 1995

Indicate by check mark whether the Registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

[] Yes [] No

APPLICABLE ONLY TO CORPORATE REGISTRANTS

Indicate the number of shares outstanding of each of the Registrant's classes of Common Stock, as of the latest practicable date.

2,152,851 shares of Common Stock, \$.01 par value, as of December 22, 1995. There is only one class of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Listed hereunder the following documents if incorporated by reference and the Part of the Form 10-K (e.g., Part I, Part II, etc.) into which the document is incorporated: (i) any annual report to security holders; (ii) any proxy or information statement; and (iii) any prospectus filed pursuant to Rule 424(b) or (c) under the Securities Act of 1933. The listed documents should be clearly described for identification purposes (e.g., annual report to security holders for fiscal year ended September 30, 1995).

PART III (Items 10-13) is incorporated by reference to the Registrant's proxy statement for the Registrant's Annual Meeting of Shareholders to be held on or about February 29, 1996.

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PART I

ITEM 1. BUSINESS

GENERAL DEVELOPMENT OF BUSINESS

Amtech Systems, Inc. (hereinafter the "Company" or the "Registrant") was incorporated in Arizona in October, 1981, under the name Quartz Engineering & Materials, Inc., and changed to its present name during 1987. At its inception the Company's business was the manufacture of low technology quartzware implements for sale to and use by manufacturers of semiconductor chips. The Company is currently, and has been since 1987, engaged primarily in the manufacture of several items of capital equipment, one of which is patented, used by customers in the manufacture of semiconductors. The Company has recently obtained a U.S. patent on technology on which it expects to base a proposed new photo chemical vapor deposition ("CVD") product for use in semiconductor manufacturing facilities. The Company has engaged the University of California, Santa Cruz, to conduct a study to determine the feasibility of such a product. If the results of the study are favorable, the Company intends to commence to design, manufacture and market a photo CVD product. See Semiconductor Equipment Business, below.

Until recently, the Company also was engaged in the technical contract personnel business through a subsidiary, Echelon Service Company ("Echelon") in Baltimore, Maryland. In October 1995, the Board of Directors of the Company determined to dispose of the stock of Echelon in order to allow the Company to focus on its core semiconductor equipment business. The Company has executed an agreement with Eugene R. Hartman, Vice President of the Company and the President of Echelon, to sell all of the stock of Echelon to Mr. Hartman in exchange for 98,016 shares of Amtech Common Stock held by Mr. Hartman and additional cash consideration. See Technical Contract Personnel Business, below.

Revenues of the semiconductor equipment business were 60% of total

revenues in fiscal 1995 and generated 81% of the total gross profit while revenues for the technical contract personnel business were 40% of the Company's total revenues and generated 19% of its gross profit. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, below.

The Company is dependent for its management and important business relationships on the active participation of its President, Mr. J. S. Whang and for general management of the technical contract personnel business on the services of Mr. Eugene R. Hartman, a Vice President of the Company and Chief Operating Officer of the technical contract personnel business.

SEMICONDUCTOR EQUIPMENT BUSINESS

General

The Company is engaged primarily in the manufacture and marketing of several items of capital equipment used by customers in the manufacture of semiconductors. Semiconductors,

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or semiconductor "chips," are made of silicon and are part of the circuitry of electronic computers. Their manufacture involves complex operations during which silicon wafers (the substrates from which chips are made) are inserted in a diffusion furnace and subjected to the precise flow of gases under very intense heat. The Company's products are intended to permit its customers to increase the degree of control over the manufacturing environment and to reduce exposure to contaminants by reducing the amount of human contact during the process. Following an industry trend, the size of individual chips has tended to decrease and the size of the wafers from which chips are made has tended to increase. As a result, the value of each wafer has increased because each is the source of an increased number of chips. As the value of wafers increase, so too does the importance of control over the manufacturing environment.

There is also a trend in the industry, related to the trend to smaller chips, to the use in new semiconductor manufacturing facilities of newer technology, vertical diffusion furnaces, which are more efficient to use than older technology horizontal diffusion furnaces in certain manufacturing processes of smaller chips on larger wafers. Vertical diffusion furnaces are, however, significantly more expensive to purchase than horizontal diffusion furnaces. The Company's products are useable with horizontal diffusion furnaces only. The Company's target market consists of customers who wish to increase the efficiency of their existing semiconductor manufacturing facilities equipped with horizontal diffusion systems. The Company's target market also includes customers who build new facilities but whose operations do not require the higher priced vertical diffusion furnace systems. Based on market information obtained through customer and market contacts, the Company believes that approximately 70% to 80% of worldwide semiconductor manufacturing facilities are equipped with horizontal diffusion furnaces and 20% to 30% with vertical diffusion furnaces. While the Company estimates that over a five-year period the percentage of facilities in the world equipped with each type of system will become equal, it believes that a significant demand for its present product line will continue to exist during that period, although there can be no assurance in that regard. The Company plans to increase its share of the market by expanding its product line through the manufacture of horizontal diffusion furnaces, thus adding to the number and variety of the Company's products and expanding its sales, marketing and manufacturing in Europe. The expanded manufacturing and sales operations are located at a leased facility in Hoogeveen, Netherlands. As further described herein, these changes are expected to result in increased worldwide sales of the Company's existing products as well as increasing revenue through sales of its proposed new furnace line.

The Company recently obtained a U.S. patent on technology on which it expects to base a proposed new photo-assisted CVD product for use in semiconductor manufacturing facilities, including those equipped with both vertical and/or horizontal diffusion furnaces. The Company has engaged the University of California, Santa Cruz, to conduct a study to determine the feasibility of such a product. If the results of the study are favorable, the Company intends to design, manufacture and market a photo-assisted CVD product.

The semiconductor equipment business produced approximately 60% of the Company's total revenues, 81% of its gross profits and 80% of the operating profits for fiscal year 1995. During fiscal year 1995, approximately 62% of the semiconductor equipment segment's revenues were derived from the sale of new systems, including upgrades and retrofits of previously sold

systems. The remainder of semiconductor equipment revenues (approximately 38%) was derived from the sale of replacement parts and ancillary items.

Existing Products

Atmoscan(R)

The Company's "Atmoscan(R)" is a patented controlled environment wafer processing system for use with horizontal diffusion furnaces. It is comprised of a flanged quartz tube and several metal parts. When in use, the flanged tube is loaded with wafers and inserted into the diffusion furnace under a nitrogen controlled environment. The technology protected by the Company's Atmoscan(R) patents is a processing method that includes a cantilever tube that carries wafers and through which a purging inert gas flows during the loading and unloading of wafers into and out of the diffusion furnace.

The Company believes that among the major advantages afforded by the Atmoscan(R) product are increased control of the environment of the wafers during the gaseous and heating process, thereby increasing yields and decreasing manufacturing costs, and a decreased need for the cleaning of diffusion furnace tubes, which ordinarily involves substantial expense and equipment down time. Additional significant economies in the manufacturing process are also believed to result.

The Company has manufactured and sold Atmoscan(R) units to major semiconductor manufacturers in the United States, the Pacific Rim and Europe, including at various times to International Business Machines, Intel Corporation, Samsung, Digital Equipment Corp., Motorola, SGS-Thompson and others. During fiscal 1995, Atmoscan(R) units were sold in a price range of approximately \$26,000 (for simpler models without accessories or ancillary items) to approximately \$70,000 (for more complex models). As discussed elsewhere, sales of Atmoscan(R) have declined from their peak in 1989, due to an industry trend toward use of vertical diffusion furnaces.

The Company has designed and sells an open cantilever paddle system as an alternative to the closed processing method of the Atmoscan(R). The per unit price is approximately \$13,000-\$18,000, depending upon the customer's specifications.

IBAL

"IBAL" is an acronym for "Individual Boats with Automated Loading." Boats are quartz trays that hold silicon wafers while they are being processed in diffusion furnaces. IBAL is a device, including software, which automatically places boats into Atmoscan(R) tubes or on open cantilever paddle systems before they are inserted in the diffusion furnace and automatically removes the trays after completion of the process. The Company has sold units of the IBAL for approximately \$20,000 to \$25,000 each, not including the price of the Atmoscan(R) or open cantilever paddle system. Use of the IBAL products reduces human handling and, therefore, reduces exposure of wafers to contaminants during the loading and unloading of the process tubes.

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The IBAL Butler is a robotics device which further automates the loading of wafers into the diffusion furnace by automatically transferring wafer carriers onto the IBAL for loading into the Atmoscan(R) for the appropriate furnace tube. The unit price for the IBAL Butler is approximately \$40,000\$ or on the open cantilever paddle.

The IBAL Queue provides a convenient staging area for the operator to place boats on a load station and automates the loading of those boats onto the IBAL Butler. IBAL Queue was first developed and offered for sale in the fourth quarter of 1993 and the first unit was shipped during the second quarter of fiscal 1994. The unit price for the IBAL Queue is \$27,000.

Load Stations

The products described above are offered and sometimes sold as a complete system, mounted on a device called a "load station," which also includes an ultra-clean environment for wafer loading by filtering and controlling the flow of air. The Company began shipping load stations in fiscal 1992. The price for the load station alone (in addition to the price for the component systems described above) is approximately \$60,000, depending upon the complexity of a customer's requirements. Depending on configuration, which varies from order to order, complete load stations with loaders and IBAL automation have been sold at prices between \$150,000 and \$320,000.

The Company offers horizontal diffusion furnaces utilizing existing industry technology for sale to customers who do not require the advanced automation of, or cannot incur the major expense of acquiring, vertical diffusion furnaces. While the major advantage of vertical diffusion furnaces is their susceptibility to increased automation, which decreases the degree of human intervention in the manufacturing process, the use of horizontal diffusion furnaces, with less automation, is more economical for larger size chips and multi-model semiconductor manufacturing. While overall market demand for horizontal diffusion furnaces is declining, the Company believes that a niche market will persist. As of the date of this Report, the Company has sold six furnaces

The Company has transitioned from being a purchaser of horizontal diffusion furnaces substantially assembled by suppliers to being a manufacturer. The Company continues to acquire the frames and covers for furnaces from subcontractors. This transition is being pursued as part of a plan to increase both the number and variety of products offered by the Company and to expand its sales, marketing and manufacturing capabilities. The Company has expended approximately \$1 million in cash in the acquisition of certain assets useable in the manufacture and sale of horizontal diffusion furnaces and ancillary items to fund the start-up and operation of an expanded horizontal diffusion furnace business using such assets. Those assets include items purchased from another company which had previously acquired the entire business of a bankrupt company, Tempress B.V., located in the Netherlands. That business involved the development, manufacture and sale of a number of different products, including a horizontal diffusion furnace. The Company also acquired from the bankrupt estate the right to use the trade name "Tempress" in connection with such furnaces. The right to use the tradename "Tempress" is also held by three subsidiaries of Tempress in connection with the sale of other

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Tempress products and services unrelated to the horizontal diffusion furnace. The Company has hired a number of former Tempress technical and sales personnel to design, manufacture and sell its own furnace products under the "Tempress" name. The Company believes that the causes of the Tempress bankruptcy were related to the fact that Tempress was undercapitalized and that large expenditures were incurred in the development of other products, and was not related to the quality or reputation of the Tempress products. Accordingly, the Company believes that a diffusion furnace product designed by former Tempress product engineers and sold under the "Tempress" name will be accepted by the Company's targeted market. See Engineering - Research and Development and Marketing, below.

There is, of course, no assurance of success in the Company's efforts to design and market horizontal diffusion furnace products. If the Company's efforts do not succeed, the Company may suffer significant losses. The expanded manufacturing and sales operations are expected to be located at a leased facility in Hoogeveen, Netherlands. The Company's ability to carry out its plan is subject to risk, arising in part from the cyclical nature of the business. There is a further risk that, as is estimated by at least one market research firm, the installation of new vertical diffusion furnaces will increase at a faster rate than is estimated by the Company. In that case, the demand for and sales of the Company's horizontal diffusion furnaces may be below the Company's estimates, its revenue and possible earnings may not increase as expected and the period of start-up losses for the Netherlands operation may extend for a period longer than the first year.

Proposed New Products

CVD Technology

The Company has patented a certain invention which it believes may be of significant importance to the semiconductor manufacturing industry. It is now having a research study conducted to determine the feasibility of developing semiconductor manufacturing equipment using this patented invention. The invention relates to an improvement to the photo-assisted CVD process used in the manufacture of certain semiconductors. The improvement uses ultraviolet light to activate the deposition reactions rather than heat, which is presently the common means in commercial CVD processing. This photo-assisted CVD process is separate and distinct from the diffusion process in which the Company's existing products are used and its use is not limited to horizontal diffusion furnace facilities as are the Company's existing products.

A photo-assisted CVD process is potentially attractive for the manufacture of semiconductors because it allows a less severe processing environment. First, the photo-assisted CVD processes occur at lower temperatures and the lower temperature reduces the risk of defects in the deposited materials. In this process, ultraviolet or UV light is used as the energy source to effect the deposition of chemicals on the wafers. The photo-assisted CVD processes also avoid radiation damage which can occur with currently prevalent

processes. Furthermore, photo-assisted CVD processes based on the Company's patented method are more readily adaptable to the use of larger wafers (the silicon substrates from which semiconductor chips are made) than other CVD processes now in use. The trend in the industry is to the use of larger size wafers and smaller size chips.

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At present, photo-assisted CVD processes are not widely used because the optical windows through which the UV light is introduced become covered by the same material that is deposited on the substrates. The window deposition results in absorption of the UV light before the light can activate further deposition on the substrates. The window deposition may also significantly degrade the uniformity of thickness of the deposited material. Although various other patented techniques have been used to alleviate or remedy this problem, none of them is believed by the Company to be satisfactory.

UV lights currently available are not sufficiently intense for high through-put manufacturing. While the Company's technology will not solve the UV light intensity problem, the second phase of the feasibility study will investigate available higher intensity light sources. The development of a higher intensity UV light may increase the market for the product, and such development may be attempted by the Company.

The concept of the Company's invention is to use a battery of individually controllable UV lamps, each embedded in an elongated pipe (light pipe) with its own window. The technology protected by the Company's photo-assisted CVD patents is described as a processing method that includes the introduction of inert purging gas into the base of each light pipe opening with sufficient velocity to flow against reactant gas molecules (which are intended to be deposited on the wafers) and prevent them from reaching and being deposited on the window or the lamps, thus avoiding clouding.

The Company has not determined whether a commercially feasible product can be developed from this technology. The Company has entered into a Research Agreement with the Regents of the University of California ("University") whereunder a feasibility study is being undertaken by the University under the direction of Roger W. Anderson, Ph.D. The study commenced on or about March 14, 1994 and has proven that the Company's patented photo-assisted CVD method solves the window deposition problem. The study has been extended to February 28, 1996 to confirm the deposition rate and the commercial feasibility of the Company's potential method.

The total cost of the study to the Company is fixed at \$441,620 of which \$355,405 was paid in fiscal 1994. The University is to provide all necessary facilities. Necessary equipment not on hand will be purchased by the University out of the Company's payment. The equipment so purchased and the product prototype, if successfully developed, will remain the University's property subject to the Company's rights to certain intellectual property developed from the study and the right to reasonable access to the equipment and the prototype for customer and other demonstrations. The Company will reimburse the University the cost of chemicals and supplies consumed in such demonstrations.

The University has agreed for a period of three years to protect as the Company's confidential information all information, techniques and methods developed through the study that are related to the development, design and construction of the photo-assisted CVD prototype except for (i) information which is or becomes common knowledge other than through a breach of the agreement, (ii) information as to the results of the study which does not disclose the methods whereby the results were achieved, and (iii) information required to be disclosed by law. The University has the right to publish information of general scientific and academic

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interest without disclosing any confidential information and a copy of any such publication is to be furnished to the Company in advance to assure against such disclosure.

Any new inventions developed out of the study should be the property of the party whose employee is the inventor. Each party shall have an undivided interest in any invention made jointly by employees of both parties.

It is acknowledged in the agreement that the University also claims rights in certain pre-existing intellectual property related to the photo-assisted CVD process. While it is understood that the Company's patented technology is to be the primary focus of the study, it is contemplated that inventions based on the University's claims may result from the study. If so,

the Company will have a period of 90 days after disclosure to it by the University of such an invention in which to elect to obtain an exclusive, royalty-bearing license to make, use and sell any such invention first actually reduced to practice in the performance of the study. If the Company elects to obtain such a license, it will assume all costs of obtaining and maintaining patent protection whether or not a patent is actually issued. The parties will then negotiate in good faith as to the terms of such a license and if no license agreement is concluded within 120 days of the date the Company elects to obtain such a license, the Company will no longer have any rights with respect to such inventions. The parties have agreed that the royalty payable by the Company under any such license shall be one-half of one percent (0.5%) of the net sales of products based on a University patent which is an improvement to the Company's patent and between 2% and 4% on the net sales of products based on other University inventions. In the case of joint inventions, the royalty rate is to reflect the relative contribution of the parties to the development of such inventions.

The agreement expires on February 28, 1996. The agreement may be terminated by either party if Dr. Anderson becomes unwilling or unable to continue the study and a mutually acceptable substitute is not available or at any time by the Company upon 30 days prior written notice to the University.

It is anticipated that, if the results of the University study are favorable, the Company will design and develop specifications for an initial photo-assisted CVD device. The initial device is expected to have one "chamber,"containing a number of light pipes and a pedestal (called a susceptor) to hold wafers and would be sold to academic and industry research facilities. If, as expected by the Company, use by such facilities results in acceptance of the technology by the industry, the Company will attempt to develop a fully automatic multi-chamber, multi-wafer product for mass production of semiconductors. The automation (or robotic) components of the product are expected to be procured from other manufacturers.

The Company's current plans for the proposed new photo CVD product are conceptual only. Detailed planning is expected to be done if, as and when the University study demonstrates the product's commercial feasibility. The development of first a research laboratory product and then an industrial product is expected to take a period of approximately two to three years.

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The total cost of the photo-assisted CVD product development effort is expected to be approximately \$3,200,000, expended in stages over a two to three year period. All of the Company's plans and estimates are subject to significant uncertainties.

Wafer Reclaiming Venture

In November 1995, the Company entered into a joint venture agreement pursuant to which it acquired a 45% ownership interest and a 50% voting interest in Seil Semicon, Inc. Seil Semicon, Inc., which is in the preliminary start-up phase intends to develop and operate a silicon test wafer reclaiming business. The Company agreed to invest \$500,000 in the venture, \$250,000 of which was paid in November 1995 and the remainder of which will be due at the time Seil Semicon obtains \$3 million in third party financing. Seil Semicon has acquired real property for construction of the reclamation facility. The ultimate success of the venture depends on a number of factors, including securing adequate financing, of which there can be no assurance.

Order Backlog

As of November 30, 1995, the Company's order backlog for semiconductor equipment was approximately \$4,980,000 compared to approximately \$2,187,000 at the same date in the previous year. The Company includes in its backlog all credit approved customer purchase orders. The Company anticipates that \$3,340,000 and \$1,640,000 of its current backlog will be shipped in fiscal 1996 and 1997, respectively. Orders in the backlog may be canceled by the customer upon payment of mutually acceptable cancellation charges. While the current backlog includes the orders of one customer to be shipped over two fiscal years, orders generally are shipped within one to six months of receipt. Accordingly, the backlog may not be a valid measure of revenue for a future period. In addition, a backlog does not provide any assurance that the Company will realize a profit from the order.

Manufacturing

The Company purchases quartz and metal components of its products from competitive market sources and inspects and assembles them at its plant in Tempe, Arizona. Certain parts of the system are machined at the Company's own machine shop. With the exception of quartz components, no procurement problems are currently being encountered nor are any such problems considered likely. The Company is experiencing long lead-times of four to six months for quartz

components, requiring it to quote longer lead times for certain of its products. The Company expects to conduct similar assembly operations for its proposed furnace line at a leased facility in Hoogeveen, Netherlands. If the proposed photo-assisted CVD product is developed, the Company plans to continue to rely on suppliers for most parts and to do a small amount of machining work internally.

Engineering - Research and Development

The Atmoscan(R), was acquired in 1983 through a licensing arrangement with its inventor, who was not employed by the Company. The other products were developed by Company personnel. The patented photo-assisted CVD technology was invented and patent rights assigned to the Company by an employee. The Company presently employs at its Tempe, Arizona plant, three engineers (including one with sales support responsibilities) and four technicians. Product

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development in the past has been accomplished in an important part through cooperative efforts with a key customer and such cooperation is expected to continue to be a significant element in the Company's future development efforts. The Company's relationship with that customer are substantially dependent on the personal relations established by the Company's President, Mr. Jong S. Whang. It is anticipated that approximately five additional engineers and technicians will be required for the proposed new photo-assisted CVD product development effort.

The Company presently employs one engineer and six technicians for its Netherlands operation. These employees design and support the horizontal diffusion furnace product line manufactured in the Netherlands.

The Company may from time to time seek to develop or acquire new products other than those described above to the extent that funds may be available.

Patents

Generally, the effect of a patent is that the courts will grant to the patent holder the right to prevent others from making, using and selling the combination of elements or combination of steps covered by the patent.

The Company has several United States patents on the Atmoscan(R) system, each reflecting an improvement to or modification of the previous patent. The two Japanese patents pending on the Atmoscan(R) cover the first two U.S. patents listed in the table, below.

Other than certain patents on the IBAL automation, neither the IBAL, cantilever, load stations nor the diffusion furnace products are protected by patents.

The following table shows the patents granted and the expiration date thereof and the patents pending for the Company's products in each of the countries listed below:

Product	Country	Expiration Date or Pending Approval
Atmoscan (R)	United States United States United States United States Korea Japan Japan European Patent Community	July 10, 2001 September 24, 2002 July 2, 2002 August 30, 2005 May 30, 1999 June 1, 2004 July 18, 2005
	- France - Germany - United Kingdom - Italy - Netherlands United States	July 18, 2004 July 18, 2004 July 18, 2004 July 18, 2004 July 18, 2004 Pending Approval

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Country

Expiration Date or Pending Approval United States June 1, 2010
United States November 15, 2011
Japan Pending Approval

The Company's ability to compete may be enhanced by its ability to protect its proprietary information, including the issuance of patents and trademarks. While no intellectual property right of the Company has been invalidated or declared unenforceable, there can be no assurance that such rights will be upheld in the future. There can be no assurance that in the future products, processes or technologies owned by others, necessary to the conduct of the Company's business can be licensed on commercially reasonable terms.

Marketing

Photo CVD

Photo CVD

Photo CVD

There are two components of the market for the Company's existing products, which consists of semiconductor manufacturers in the United States, Western Europe, Taiwan, Korea, Japan and recently the People's Republic of China and India. One component consists of customers who are installing new semiconductor manufacturing facilities. The other component consists of customers who wish to install new equipment systems in existing facilities. The Company's products have been sold in both components. The market for the Company's existing products is as described above. The Company intends to increase its share of that market by adding the horizontal diffusion furnace manufactured by the Company in its Netherlands facility to its product line and increasing its sales, marketing and manufacturing capabilities in Europe. This plan has and is expected to increase revenue not only through sales of a new product, but to increase sales of other products by permitting the Company to offer a wider product line, enabling customers to fill more of their needs through purchases of the Company's products and by permitting the Company to offer more complete load stations (described above). For example, the Company expects to generate increased sales of diffusion furnaces because it will offer them together with Atmoscan(R) and IBAL products. The Company also expects to obtain orders for its new horizontal diffusion furnace from former Tempress customers as well as customers in the United States, a large market that had not been effectively penetrated by Tempress in recent years.

The Company's installed base of customers (facilities at which the Company's products are installed and operating) includes IBM Corporation, Motorola, Digital Equipment, Texas Instruments, Intel Corporation, National Semiconductor, Rockwell International, Phillips, Northern Telecom, SGS-Thomson, Mitsubishi, Oki, Samsung, Hyundai, UMC and Wuxi China. Of these corporations, IBM Corporation, Motorola, Digital Equipment, Intel Corporation, SGS-Thomson and Samsung have been customers of the Company for approximately 11 years.

The Company markets its products by participation in trade shows, by direct customer contact by the Company's sales personnel (currently the President and two salesmen in the United States and two sales and marketing personnel located in the Netherlands) and through independent sales representatives and distributors. The Company is dependent on its President, J.S. Whang, for continuing relationships with key customers.

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During fiscal 1995, three customers accounted for 28%, 11% and 14%, respectively, of equipment sales. No other customers accounted for 10% or more of this segment's sales. For a more complete analysis of significant equipment customers, see Note (4) of the Notes to Consolidated Financial Statements included herein (the "Financial Statements").

There are presently eight independent sales representatives, each covering a specified geographical area on an exclusive basis. The areas now covered by representatives are the State of Florida, the New England area, Northern Europe, Central Europe (including Germany), France, India, Italy, Korea, Taiwan, and the People's Republic of China. Representatives are paid a commission as specified from time to time in the Company's commission schedule, which at present is higher for complete units and lower for spare parts and accessories. Furthermore, a discount is allowed to a customer who is a manufacturer of diffusion furnaces.

Upon the development of the proposed photo-assisted CVD product, the Company will seek initially to make sales to customers who have assisted and will continue to assist in further development. Such customers will probably be allowed a discount from published prices. Although marketing the new product, if it is successfully developed, will probably result in an increase in the number of marketing employees and in advertising and other marketing expense, the amount cannot now be predicted with any degree of accuracy.

Semiconductor equipment sales generally fluctuate with the level of capital spending in the semiconductor industry. The semiconductor business is cyclical.

Competition

The Company is not aware of any significant product which directly competes with the Atmoscan(R), however, there are several processing systems and various configurations of existing manufacturing products which provide advantages similar to those that the Company believes the Atmoscan(R) provides to semiconductor manufacturers. Notwithstanding the industry trend to the use of vertical diffusion furnaces (with which Atmoscan(R) is not useable), the Company believes that a number of customers are and will continue to be willing to buy Atmoscan(R) units for use with horizontal diffusion furnaces because the Atmoscan(R) provides better results in terms of more uniform wafer temperature and dispersion of heated gases in the semiconductor manufacturing process, less exposure of semiconductor wafers to contaminants, and other technical advantages which afford to its users a higher yield and, therefore, a lower per item cost in the manufacture of semiconductors. The Company believes that there are several products in the market which perform the same functions as the IBAL automation products, IBAL Atmoscan(R), IBAL Butler and IBAL Queue, but they are more complex and more expensive. The IBAL products are intended for customers who do not require the more complex systems. Load stations are sold to customers that are upgrading their existing facilities with other products of the Company. These load stations provide a cleaner environment to those they replace and can reduce the down-time for the upgrade as these load stations were specifically designed to accept the Company's products without further modification. Products competitive with the Company's load station are sold by several well-established firms, larger than the Company. The Company believes, however, that there is a niche market for its load stations because Atmoscan(R) and IBAL are included as components. The cantilever system is designed for easy assembly and disassembly to minimize down-time during maintenance. The Company expects

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to sell its horizontal diffusion furnaces to customers who purchase them in small quantities and that it will maintain a competitive position through its policy of providing competitive prices and product support services designed for the customer's specific requirements.

Competition to be expected for the proposed photo-assisted CVD product cannot now be determined. It should be assumed, however, that others in the industry are in the process of developing new products and improving existing ones.

Employees

The Company presently employs 43 people (including the corporate officers and three contract employees) in its semiconductor equipment business; 16 in manufacturing, 13 in engineering, six in administration, and six in sales positions. Of these, 27 are employed at the Company's offices and plant in Tempe, Arizona, and 16 at its facility in Hoogeveen, Netherlands.

TECHNICAL CONTRACT PERSONNEL BUSINESS DISCONTINUED OPERATIONS--SALE OF ECHELON

General

The Company entered the technical contract personnel business through the acquisition in 1988, from Mr. James D. Renner, of RTS, Inc. ("RTS"), which business was principally conducted in the greater Phoenix, Arizona, area, with operations in Texas and New Mexico. In 1989, a similar business, Echelon Service Company ("Echelon"), in Baltimore, Maryland, was acquired from Mr. Eugene R. Hartman. Mr. Hartman is currently a Director of the Company. In 1990, the Company continued its personnel business expansion through the acquisition of several businesses in Los Angeles, California known as Martec from Mr. Martin L. Simons.

In 1992, RTS, Inc. and Martec, together with various wholly owned subsidiaries, were sold to another company. Under an agreement with the buyer, the Company agreed not to engage in the temporary personnel business in those areas until October 1, 1997. The Company's technical contract personnel business is conducted through a wholly owned subsidiary, Echelon, located in Baltimore, Maryland. Echelon furnishes technical employees to customers located in Baltimore and nearby areas (including Baltimore County and the eastern half of Maryland, Washington, D.C., Northern Virginia and Pennsylvania).

Customers usually employ contract personnel when the estimated period of their need for the personnel is uncertain or believed to be short term, generally for periods of approximately six months. This practice reduces the customers' exposure to increased unemployment tax rates and other adverse

consequences of frequent employee lay-offs, reduces their recruiting expenses with respect to short term employees, and relieves them of the necessity of including technical contract personnel in various employee benefit plans.

Arrangements with customers typically specify the Company's charges (usually a contractually fixed mark-up over the compensation paid to the technical employee), the amount

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and type of insurance to be maintained by the Company (such as workmen's compensation) and, the administrative functions to be performed by the Company (such as checking immigration status and processing applications for security clearances in connection with defense-related employment). The agreements set forth the terms to be applied if and when personnel are furnished to the customer; they do not require that the customer employ or that the Company furnish any personnel.

The contract employee is in all legal respects an employee of the Company for the time, and under the conditions, specified by the customer. The Company is responsible for paying the employee, and making appropriate payroll deductions and payment of proper amounts for income taxes, social security and the like. Customers are billed on a periodic basis. All direct payroll costs (employer's social security contributions, unemployment and workmen's compensation insurance premiums, etc.) are borne by the Company. In addition, the Company provides certain limited fringe benefits to certain technical employees who meet criteria in terms of length and, steadiness of employment with customers. Contract personnel are employed and paid by the Company only when they are engaged by a customer. Employee compensation is for the most part determined by negotiated agreements between the Company and the customer and between the Company and the employee, but in some areas are set by agreement between the Company's customer and the particular employee.

The gross profit (or margin) of the Company from personnel operations is the difference between the fee which is paid to the Company by the customer and the compensation of the technical employee plus direct and indirect payroll costs paid by the Company. The Company's fee is usually an agreed upon percentage of the employee's compensation. Variable factors affecting the earnings of this business are the cost of technical employee fringe benefits, payroll taxes, certain insurance premium costs to the extent that they can be influenced by the Company and the Company's related overhead expense. There is currently a trend to increased unemployment insurance and workers' compensation costs.

The Company seeks to fill customer requests for specific types of technical employees with personnel selected on the basis of information maintained in its files, or with personnel who respond to help-wanted advertising, active solicitation and referrals. In most cases, the final hiring decision is made by the customer after conducting individual interviews with persons, selected by the Company as well as those referred by competitors.

Customers rarely if ever enter into exclusive agreements with any technical contract personnel supplier. They maintain agreements with several selected technical contract personnel companies and specific requirements are usually communicated to all of them.

Source and Availability of Contract Personnel

The Company conducts a continuing recruiting effort to increase the number of prospective employees who desire to obtain temporary employment through the Company. This effort is conducted through general advertising in trade journals, advertising to fill specific positions, active solicitation and referrals. The Company has not experienced any material difficulties in recruiting employees qualified to meet customer requirements.

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Marketing and Customers

Most of the Company's customers and prospective customers usually solicit bids or proposals from personnel suppliers by submitting "requirements" for specific types of personnel on an employee-by-employee basis, with compensation being negotiated on an individual basis as well. At such times the Company, if it wishes to seek the business, prepares and submits a proposal to the customer or prospective customer which covers the fee or mark-up and an undertaking to comply with customer requirements with respect to insurance and

administrative matters. Company management personnel also seek to answer customer questions and convey assurances as to the Company's experience and capabilities in furnishing technical contract personnel and otherwise performing customer services.

Successful marketing often depends on the ability of individual management and marketing personnel to create and maintain good relationships with the customer's personnel management.

During fiscal 1995 and 1994, Martin Marietta accounted for approximately 14% and 33% of Echelon's revenues, respectively.

Echelon markets itself as being a reliable source of highly skilled contract engineering talent. As such, many of the customers tend to be engineering and technology driven companies which require additional personnel for specific projects. The Company emphasizes maintaining as large a customer base as possible, in order to minimize the pressure on prices and the volatility in revenues that sometimes results from being dependent upon one customer.

Seasonality

There is a certain seasonal aspect to the technical contract personnel business which is caused by the effect of payroll taxes. The Company is responsible for paying unemployment taxes and the employer's share of social security taxes. When the maximum amount of such tax is reached for an employee, the Company no longer makes payments in respect of the employee and its earnings are thereby increased. Accordingly, the earnings of the technical contract personnel business are higher during approximately the last three months of the calendar year (corresponding to the Company's first fiscal quarter) than during other periods of the year. Payroll taxes tend to be the highest and earnings the lowest in the first three months of the calendar year (corresponding to the Company's second fiscal quarter) as this is the period during which the Company pays unemployment and social security taxes on all employees.

Competition

Competitive factors in the technical contract personnel business are price (the amount of fee or mark-up over the salary or wage paid to the technical employee), ability to furnish the type of personnel required by the customer promptly and the quality of service given to customers. The supplier with the largest number of qualified prospective technical employees and the information systems necessary to promptly match their skills and experience to the job requirements has a competitive advantage. A number of the Company's competitors are much

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larger and better financed than the Company and as a result may be able to offer lower mark-ups to customers because of economies of scale.

Overhead Personnel

Echelon has a total of five overhead employees, including one each in management, personnel recruiting, sales, administration and clerical.

Plans to Dispose of Contract Personnel Business

In October 1995, the Board of Directors of the Company determined to dispose of the contract personnel business in order to allow the Company to focus on its core semiconductor equipment business. In December 1995, the Company executed an agreement with Eugene R. Hartman, a Vice President of the Company and the President of Echelon, to sell all of the stock of Echelon to Mr. Hartman in exchange for 98,016 shares of Amtech Common Stock held by Mr. Hartman and additional cash consideration. The total consideration for the Echelon Stock is valued at approximately \$1.2 million. Of that consideration, approximately \$800,000 will be in the form of Amtech Stock and approximately \$400,000 will be in the form of acash distribution by Echelon to Amtech prior to the sale. To the extent Echelon does not have enough cash to make the full distribution, the balance will be paid by assigning receivables to Amtech.

Prior to entering the agreement with Mr. Hartman, the Company sought and negotiated offers from third parties. However, in the opinion of the Board, the best offer was tendered by Mr. Hartman. The transaction was conducted at arms' length, and management does not believe that a better deal could have been made with unrelated third parties.

As a result of the disposition of Echelon, operation and financial data related to the contract personnel business are identified as a "discontinued operation" in the Company's financial statements.

FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

The following table shows the amounts of revenue attributable to the Company's foreign sales for the past three fiscal years (the United States equipment sales being included in the table for comparison purposes). All foreign sales were associated with the Company's semiconductor equipment business and none were to affiliates.

<TABLE>

<caption></caption>					
	1995		1994		
1993					
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
United States (1) (49%)	\$2,462,852	(36%)	\$2,472,176	(51%)	\$2,003,064
Far East (2) (44%)	3,483,419	(51%)	1,136,432	(26%)	1,798,670
Europe (3) (7%)	493,786	(7%)	222,376	(5%)	286,152
India (-0%-)	424,011	(6%)	500,095	(12%)	-

\$4,331,079 (100%)

\$4,087,886

\$6,864,068 (100%)

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- (1) Includes sales in Canada, which are not material.
- (2) Includes Korea, Singapore, Taiwan, Japan and the People's Republic of China.
- (3) Includes sales in Israel, which are not material.

</TABLE>

Total

(100%)

For a further description of foreign $\,$ sales, see $\,$ Note (4) of the Notes to the Financial Statements included herein.

ITEM 2. PROPERTIES

The Company's semiconductor equipment business and corporate offices are located in 9,000 square feet of office and manufacturing space at its principal address. The facility is leased at a current rate of \$3,515 per month for a term to expire on August 31, 1996.

The Company also leases approximately 2,270 square feet of general space on a month to month basis in Hoogeveen, Netherlands, at a current rate of \$1,215 per month. This facility will not provide adequate space for the Company's assembly operations for its furnace line in the second half of fiscal 1996, and accordingly the Company will be required to lease additional space, which is believed to be available at prevailing lease rates.

If the results of the University study (described above) are favorable and the Company commences a photo-assisted CVD product development effort, an additional 2,000 square feet will be required for a laboratory. That laboratory, together with the Company's existing plant facility will, the Company believes, be adequate through the first year of the development effort. If and when commercial production begins, an additional 10,000 square feet of space may be required. No difficulty is expected in obtaining any additional space at then prevailing rents.

Echelon leases approximately 1,646 square feet of office space at 7400 York Road, Towson, Maryland, at a current monthly rental of \$2,051 the term of the lease to expire

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

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PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDERS' MATTERS

Market Information

The Company's common stock is traded in the over-the-counter market and is quoted under the symbol "ASYS" in the automated quotation system of the National Association of Securities Dealers SmallCap Market ("NASDAQ").

The following table sets forth the range of the high and low bid price for the shares of the Company's common stock for each quarter of fiscal years 1994 and 1995 as reported by the NASDAQ SmallCap Market.

Quarter Ended	High	Low
Fiscal 1994:		
December 31, 1993	3.88	2.63
March 31, 1994	3.88	3.00
June 30, 1994	3.50	3.25
September 30, 1994	3.50	2.63
Fiscal 1995:		
December 31, 1994	4.75	3.38
March 31, 1995	4.38	4.00
June 30, 1995	9.38	4.13
September 30, 1995	9.25	7.25

Holders

As of December 31, 1995, there were 1,527 shareholders of record of the Company's common stock.

Dividends

The Company has never paid dividends. Its present policy is to apply cash to investment in product development or expansion; consequently, it does not expect to pay dividends within the foreseeable future.

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ITEM 6. SELECTED FINANCIAL DATA

The selected financial data set forth with respect to the Company's operations for each of the years in the three year period ended September 30, 1995 and with respect to the balance sheets at September 30, 1995 and 1994 are derived from audited financial statements that have been audited by Arthur Andersen LLP, independent public accountants, which are included elsewhere in this Report and are qualified by reference to such financial statements. The statements of operations for the fiscal years ended September 30, 1992 and 1991 and the balance sheets at September 30, 1993, 1992 and 1991 are derived from financial statements not included in this Report. The selected financial data should be read in conjunction with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Company's Financial Statements (and the related notes thereto) contained elsewhere in this Report.

<TABLE>

<caption></caption>	Fiscal Years Ended September 30,						
		1004					
1991	1995	1994	1993	1992			
<s> <c> Operating Data</c></s>	<c></c>	<c></c>	<c></c>	<c></c>			
Revenues:							
Semiconductor Equipment \$2,605,496	\$6,864,068	\$4,331,079	\$4,087,886	\$2,400,777			
Technical Personnel(1) 28,915,660	4,547,860	6,224,205	4,254,594	25,462,462			
Total Revenues(1) 31,521,156	11,411,928	10,555,284	8,342,480	27,863,239			
Operating Profit by Segment:							
Semiconductor Equipment(2) 202,123	335,265	87,210	679 , 869	(417,529)			
Technical Personnel (746,846)	85,515	223,473	136,280	(678,392)			
Total Operating Profit (loss) (544,723)	420,780	310,683	816,149	(1,095,921)			
<pre>Income (Loss) from Continuing Operations(2) (58,812)</pre>	171,053	(89,469)	302,390	(911,210)			
Net Income (Loss)(2) \$(906,436)	\$226,568	\$94,004	\$508,670	\$(1,501,070)			
Primary Earnings Per Share: (3)(4)							
Continuing Operations (loss) \$(.06)	\$.09	\$(.09)	\$.31	\$(.88)			
Net Income \$(.89)	\$.12	\$.10	\$. 51	\$(1.46)			
Balance Sheet Data							
Working Capital \$2,940,144	6,163,304	\$2,244,628	\$2,722,362	\$2,334,623			
Total Assets 6,385,380	8,365,519	3,974,922	4,119,928	6,397,033			
Total Liabilities 2,236,648	1,363,291	852,103	1,091,113	3,725,888			
Long-Term Debt	-	-	-	-			
Accumulated Deficit (248,942)	(891,311)	(1,147,338)	(1,241,342)	(1,750,012)			
Shareholders' Equity 4,148,732	7,002,228	3,122,819	3,028,815	2,671,145			

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⁽¹⁾ A major portion of the Company's technical personnel business was sold during 1992, resulting in the substantial decrease in revenue from 1992 to 1993.

⁽²⁾ The results for the fiscal year 1994 include a \$355,405 expense for the

University study described elsewhere herein.

- (3) The results shown have been restated to reflect the two-for-one combination or "reverse split" of Common Stock which took place on June 4, 1993.
- (4) The results shown would be the same if they were prepared on a fully-diluted basis, except that the net income per common share for the fiscal year ended September 30, 1993 would have been \$.50.

</TABLE>

For further financial information regarding the Company's business segments, see Note (10) of the Notes to the Financial Statements included herein.

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ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Liquidity and Capital Resources

As of September 30, 1995 and 1994, cash and cash equivalents amounted to \$834,000 and \$737,000, respectively. The \$106,000 of net cash provided by operating activities resulted in the fiscal 1995 increase in cash and cash equivalents of \$97,000, or 13%.

Short-term investments, a capital resource, as well as another source of liquidity, also increased by \$3,328,000 to \$3,672,000 as of September 30, 1995. This increase resulted primarily from the \$3,623,000 net proceeds from the public offering. See Note 7 -Stockholders' Investment and Stock Options. Investments in property plant and equipment, primarily to increase the production capacity and operating efficiency of the semiconductor equipment segment and to improve a furnace used for sales demonstration and marketing purposes, resulted in the expenditure of \$328,000 of such proceeds. See the Consolidated Statements of Cash Flows included herein.

Working capital increased by \$3,918,000 to \$6,163,000 from \$2,245,000, an increase of 175%, as a result of the net proceeds from the public offering. The proceeds are substantially invested in U.S. treasury bills and notes and other short-term investments. For the same reasons, the ratio of current assets to current liabilities increased to 5.5:1 from 3.6:1.

During March 1994, the Company entered into a research and development contract with and paid \$355,000 to the University of California at Santa Cruz (the "University"). The University was to develop designs and specifications for a prototype model of a product embodying the Company's patented photo-assisted CVD (chemical vapor deposition) process and to prove the feasibility and demonstrate the practical application of such product. In November, 1995, Amtech entered into an amendment of its research and development contract with the University, which expands the Company's financial commitment by \$87,000 and extends the contract through February 28, 1996. The purpose of the amendment is to confirm the deposition rate of the Company's patented method before commencing the development of a commercial model of the photo-assisted CVD reactor at Amtech's facility.

As this study progresses, management will assess the degree of success achieved and determine how the Company will proceed. If the photo-CVD feasibility study succeeds in demonstrating the practical commercial application of the Company's patent, approximately \$3,200,000 of liquidity and capital resources are expected to be expended to develop a commercial model of the photo-assisted CVD reactor at Amtech's facility and to manufacture and market the proposed photo-assisted CVD product. This expenditure is expected to be made in two stages: approximately \$1,700,000 for the development of an initial product suitable for use in research facilities and approximately \$1,500,000 for the development of a product for use in industrial production facilities. The funds from the cash and short-term investments on hand should be sufficient for these two stages of development. However, these estimates do not include any amount for the expansion of facilities for the manufacture of a new photo-assisted CVD product designed for industrial production facilities. Funds for that expansion, if any, are expected to be obtained from cash flow from operations and other possible sources of financing,

any other source of financing.

Subsequent to the end of fiscal 1995, the Company entered into a joint venture agreement pursuant to which it would have a 45% ownership interest and a 50% voting interest in Seil Semicon, Inc. in return for a commitment to invest \$500,000 in cash. On November 22, 1995, the Company made an initial \$250,000 investment in Seil Semicon, Inc. Upon the receipt by the joint venture of \$3 million in third party financing, the Company is obligated to make an additional \$250,000 capital contribution. The joint venture intends to develop and operate a silicon test wafer reclaiming business through Seil Semicon, Inc., which is in the preliminary start-up phase. It has acquired real property for construction of the reclamation facility. The ultimate success of Seil Semicon, Inc. depends on a number of factors, including securing adequate financing, of which there can be no assurance.

In addition, the Company plans to either acquire the proprietary rights to a diffusion furnace controller to be developed by a third-party or to develop its own. The Company currently purchases its controllers from other furnace manufacturers. Subject to securing a partial grant from the Netherlands' government and final approval of the projects specifications, the Company plans to make a net investment of \$165,000 for the acquisition or development of its own diffusion furnace controller. If successful, of which there can be no assurance, the Company expects to improve its competitive position and reduce its cost of sales over the long-term.

Results of Operations

Fiscal 1995 compared to Fiscal 1994

Semiconductor Equipment Business

The revenues of the semiconductor equipment business increased \$2,533,000, or 58%, to \$6,864,000 in fiscal 1995 from \$4,331,000 in fiscal 1994. The improvement in revenues is due primarily to the \$1,811,000 in sales of Tempress horizontal diffusion furnaces and related after market parts resulting from the start-up of manufacturing in the Netherlands. Net revenues of the domestic operations were 17% higher in fiscal 1995 than in fiscal 1994, due to continued expansion in the demand by semiconductor manufacturers for production equipment and upgrades. Because Tempress will be in full operation for all of fiscal 1996 and due to the increase in the backlog, the Company believes that products sales may increase in fiscal 1996.

The gross profit of this segment was \$2,305,000 for fiscal 1995 versus \$1,561,000 for fiscal 1994, representing a 48% increase. The \$744,000 increase in gross margin primarily results from the start-up of the Netherlands operation (\$433,000), volume increases in existing product lines (\$260,000), and a reduction in the material content as a percentage of sales due to a favorable product mix and increased use of lower cost parts manufactured in-house rather than purchased from others (\$153,000). These increases in gross margin were partially offset by increases in overhead expenses and a decline in the revenue and earnings derived from the sale of products manufactured by third-parties. Gross margin as a percentage of revenue was 34% in fiscal 1995 versus 36% in the fiscal 1994, with the decline primarily being attributed to the higher fixed costs in relation to sales associated with the start-up operation in the Netherlands. Further increases in fixed costs are planned for fiscal 1996 in order to provide greater manufacturing capacity. However, because of the expected growth in revenue, gross margins may increase.

The selling, general and administrative costs associated with this segment were \$676,000 (64%) higher in fiscal 1995 as compared to fiscal 1994. The higher costs are almost entirely

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associated with the new operations in the Netherlands. However, selling, general and administrative costs remained at approximately 25% of revenues during both fiscal 1994 and 1995.

Prior to fiscal 1994 the Company had made relatively small investments in product development for a technology business. The Company increased research and product development expenditures in fiscal 1994 by \$257,000 primarily through the expenditure of \$355,405 for the University study to demonstrate the practical application of the Company's patented photo-assisted chemical vapor deposition ("CVD") process. During fiscal 1995, research and development costs consisted entirely of developing the new Tempress line of furnaces, an automated robot to load cantilever paddle systems, and product improvements. Since the 1994 feasibility study continued through the end of fiscal 1995 without any further financial commitment required, total research and development costs in fiscal 1995 were \$180,000 lower than in fiscal 1994. If the Company is unable to acquire the proprietary rights to a furnace controller developed by a third-party, as planned and as discussed above, research and development costs

could increase in fiscal 1996 by the \$165,000 cost, net of government grants, to develop its own diffusion furnace controller.

Future earnings may decline significantly as the result of increased photo-assisted CVD development expenses. Depending on the actual timing and results of the second stage of the feasibility study being conducted by the University, the Company intends to expend \$3,200,000 on research and development over approximately a three year period in order to develop a commercial product based upon the Company's patented photo-assisted CVD technology.

Operating profits for the semiconductor equipment segment were \$335,000 in fiscal 1995, as compared to \$87,000 in fiscal 1994, an improvement of \$248,000. During 1994 and 1995 the Company committed significant capital to the future growth of this segment; \$336,000 in the start-up losses of the Netherlands operation in fiscal 1995 and \$355,405 for the photo-assisted CVD feasibility study in fiscal 1994. The improvement of this segment's operating profit for the two years reflects the expansion of the domestic operations, including increases in revenue, 17%, gross margin, 19%, and operating profit after excluding the 1994 photo-assisted CVD study, 52%.

Income From Continuing Operations

Income (loss) from continuing operations before income taxes includes the operating income of the semiconductor equipment segment, discussed above, general corporate expenses and net interest income, which increased in fiscal 1995 by \$248,000, \$36,000 and \$166,000, respectively, as compared to fiscal 1994. The 14% increase in general corporate expense is principally due to incentive compensation tied to the completion of the public offering. The growth in net interest income is due to the investment of \$3,328,000 of the \$3,623,000 received from the public offering. As a result of these items, the income from continuing operations before income taxes improved by \$378,000, to \$261,000 in fiscal 1995, from a loss of \$117,000 in fiscal 1994.

The income from continuing operations is \$171,000 for fiscal 1995, an improvement of \$260,000 from the loss of \$89,000 in fiscal 1994, after taking into consideration the income tax

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provision of \$90,000 in fiscal 1995 and the income tax benefit of \$28,000 in fiscal 1994. The income tax provision for fiscal 1995 approximates the statutory rate. See Note 3 to the consolidated financial statements for further details including an analysis of the differences between the statutory rate and the actual effective rate for fiscal 1994.

The Company's semiconductor equipment segment has been and may in the future be affected by the following trends. Furnaces used in semiconductor $\frac{1}{2}$ manufacturing are for the most part horizontal. The use of vertical furnaces is increasing throughout the industry on a worldwide basis and is expected to increase in usage and in market share to an estimated 50% over approximately the next five years as the technology improves. However, the Company continues to believe that a significant demand for its present product line will exist during that period, although there can be no assurance in that regard. The reason for continued expected demand for Atmoscan(R) and horizontal diffusion furnaces is that, notwithstanding other advantages of vertical systems (e.g. reduced contamination and the capability to produce more sophisticated semiconductors more efficiently), for all but very large production runs there is a higher through-put in horizontal furnaces as compared to vertical furnaces. Also, the Company's products are often used in upgrading or retro-fitting existing horizontal furnaces in order to extend their useful life and to avoid the necessity for the customer to acquire the much more expensive vertical furnaces. Another important factor is the growth of semiconductor manufacturing using the less capital intensive horizontal diffusion furnaces in the Peoples Republic of China, where the Company made its first sale in fiscal 1993, and other less developed areas, which could further prolong the commercial life of the Company's existing products.

However, during the current cyclical upturn, demand for the Atmoscan(R) has not reached the level of the previous high which was in 1989, nor is it expected to reach that level again in future years because the Atmoscan(R) is compatible with only horizontal furnaces. Thus future sales volume is dependent upon the continued introduction of new products, such as IBAL automation products, or improved versions of products that exist in the market, such as "clean room" load stations and horizontal diffusion furnaces. The Company continues to pursue both types of product introductions. The Company's long range plans include developing, if feasible, a new product based on its patented photo-assisted CVD technology.

Discontinued Technical Contract Personnel Business

Net revenues of the technical contract personnel segment were

\$4,548,000 in fiscal 1995, compared to \$6,224,000 in fiscal 1994. Gross margins generated by these operations in fiscal 1995 and 1994 were \$543,000 and \$628,000, respectively, or 12% and 10%, respectively, when stated as a percentage of revenues. These operations also produced operating profits of \$86,000 and \$223,000 for fiscal 1995 and fiscal 1994, respectively.

The 27% decline in the revenues and the 61% decrease in operating profit of this segment in fiscal 1995 as compared to fiscal 1994 are the result of the reduction in requirements of this segment's largest customer, to a level more representative to the years preceding fiscal 1994. The margin percentage produced by these operations improved 1% due to the permanent placement business and another 1% because of higher ratio of full service business in relation to the lower margin, payroll servicing business. General and administrative costs increased

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\$34,000 as a result of the inclusion of the permanent placement business for a full year and by \$19,000 primarily from the settlement of a sexual harassment lawsuit.

In order to concentrate 100% of the Company's management and financial resources on its core semiconductor segment, Echelon, the only remaining business in the technical contract personnel business, was sold effective December 31, 1995. As a result, this segment is designated as discontinued in the consolidated financial statements. Although the income tax provision associated with this segment approximates the statutory rate in fiscal 1995, it is substantially lower in fiscal 1994 due to the resolution of uncertainties.

Due to the sale of Echelon, revenue and operating profit of discontinued operations for fiscal 1996 will include that business for only one quarter and thus will be significantly less than in fiscal 1995.

Total Company

Consolidated revenues and total operating profit are summarized for the past three years in Item 6, Selected Financial Data. Fiscal 1995's consolidated revenues were only 8% higher, or \$11,412,000, compared to \$10,555,000 in fiscal 1994, despite the 58% increase in the sales of semiconductor equipment. As discussed above, this is due to the 27% decline in the revenues of the discontinued technical contract personnel business. The 35% improvement in the operating profit, from \$311,000 in fiscal 1994 to \$421,000 in fiscal 1995, is primarily a result of growth in revenues and profitability of the domestic portion the semiconductor equipment segment operations, which is offset by the start-up losses of the Netherlands operation and the reduction in the profits of the discontinued technical contract personnel business.

The \$166,000 growth in net interest income results from the investment of \$3,328,000 of the \$3,623,000 received from the public offering. As a result of all the above factors, the combined income from continuing and discontinued operations before income taxes for fiscal 1995 was \$347,000, or \$241,000 higher, compared with \$106,000 in fiscal 1994.

The total income tax provision for the year ended September 30, 1995 approximates the federal statutory rate. The fiscal 1994 tax provision is significantly less than the 34% federal statutory rate applied to pre-tax income principally due to the \$27,000 benefit from research and development credits. As of September 30, 1995, the valuation allowance for deferred taxes is \$78,000 and results from the Company's limiting its recognition of state deferred tax assets, principally state net operating losses which can be carried forward only five years. Those state deferred tax assets will be recognized to the extent of Arizona state taxable income in fiscal years 1996 and 1997.

As a result of all of the above factors, net income for fiscal 1995 was \$227,000, or \$.12 per share, including \$.09 per share from continuing operations, as compared to \$94,000, or \$.10 per share, net of a loss of \$.09 per share from continuing operations, in fiscal 1994.

As of November 30, 1995, the Company's order backlog for semiconductor equipment was approximately \$4,980,000 compared to \$2,187,000 as of the same date of the previous year. After deducting the approximately \$1,640,000 of the current backlog that will not ship until

in semiconductor equipment revenue is for the new horizontal diffusion furnaces. Also, while there are exceptions, orders generally are shipped within six months of receipt. Therefore, growth in equipment sales and income from continuing operations will depend on how quickly productive capacity for diffusion furnaces can be expanded and the timing of the receipt of new orders. Another factor that could significantly affect profitability is the amount of research and development expenses, if any, incurred for the development of a controller for diffusion furnaces (if not purchased) and of a model of the photo-assisted CVD product designed for use in research facilities.

Fiscal 1994 compared to Fiscal 1993

Semiconductor Equipment Business

The revenues of the semiconductor equipment business increased 6% to \$4,331,000 in fiscal 1994 from \$4,088,000 in fiscal 1993. The improvement in revenues was due to the first sales of horizontal diffusion furnaces substantially assembled by suppliers, and sales to India.

The gross profit of this segment was \$1,561,000 for fiscal 1994 versus \$1,595,000 for fiscal 1993, representing a 2% decrease. The recognition of the deferred EPiC revenue net of the provision for warranty expense accounted for approximately \$130,000 of the fiscal 1993 gross profit. After subtracting the effects of recognizing the deferred EPiC revenues as described above and in Note (2) of the Notes to Consolidated Financial Statements, gross margins increased \$96,000, or 6%. Gross margin as a percentage of revenue was 36% in fiscal 1994 versus 37% in the fiscal 1993 after subtracting the effects of the recognition of the deferred EPiC revenue in fiscal 1993. Most of the improvement in gross margins results from the higher sales volume discussed above. The primary factors resulting in the decrease in the adjusted gross margin percentages are design and pricing errors resulting from the significant growth (80%) in sales from \$2,401,000 in fiscal 1992 to \$4,331,000 in fiscal 1994 without sufficiently increasing the work force.

The selling, general and administrative costs associated with this segment increased \$162,000 (18%) in fiscal 1994 as compared to fiscal 1993. The primary reasons for this increase are \$36,000 of additional travel costs primarily associated with efforts to expand foreign markets and the \$39,000 growth in commission expense primarily related to sales made in India. Furthermore, bad debt expense increased by \$69,000 due to the bankruptcy of an entity for whose products the Company acted as sales agent.

Until fiscal 1994 the Company had not made expenditures for product development at a normal level for a technology business. The Company increased research and product development expenditures in fiscal 1994 by \$257,000 primarily through the expenditure of \$355,405 for the University study to demonstrate the practical application of the Company's patented photo-assisted chemical vapor deposition ("CVD") process.

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Operating profits for the semiconductor equipment segment amounted to \$87,000 in fiscal 1994, as compared to \$680,000 in fiscal 1993, a decrease of \$593,000. The inclusion of \$130,000 of gross profit from the recognition of deferred EPiC revenue net of related warranty costs and a \$141,000 recovery from patent infringement litigation in the operating income of fiscal 1993 with no comparable items in fiscal 1994 and the \$257,000 increase in research and development costs in fiscal 1994 account for \$528,000 of the decline in operating profit. The increase in selling, general and administrative costs also contributed to the decline.

Income From Continuing Operations

In addition to the operating income of the semiconductor equipment segment, discussed above, income (loss) from continuing operations before income taxes includes general corporate expenses and net interest income, which were \$ \$7,000 and \$20,000 higher, respectively, in fiscal 1994 as compared to fiscal 1993. The growth in net interest income was due to having the funds resulting from the fiscal 1993 collection of the Martec and RTS receivables for a full year. Because of the cost of the photo-assisted CVD project, the operating profit of the semiconductor equipment segment combined with net interest income was less than the general corporate expenses for fiscal 1994, resulting in a loss from continuing operations before income taxes of \$117,000, compared to \$462,000 of income from continuing operations in fiscal 1993.

The loss from continuing operations is \$89,000 for fiscal 1994, a \$391,000 reduction in earnings from the income of \$302,000 in fiscal 1993, after taking into consideration the income tax benefit of \$28,000 in fiscal 1994 and the income tax provision of \$160,000 in fiscal 1993. See Note 3 to the consolidated financial statements for an analysis of the differences between the

statutory rate and the actual effective rate for fiscal 1994. The income tax provision for fiscal 1993 approximates the statutory rate of 34%.

Discontinued Technical Contract Personnel Business

Net revenues of the technical contract personnel segment were \$6,224,000 in fiscal 1994, as compared to \$4,255,000 in fiscal 1993. Gross margins generated by these operations in fiscal 1994 and 1993 were \$628,000 and \$444,000, respectively, or 10% in each year when stated as a percentage of revenues. These operations also produced operating profits of \$223,000 and \$136,000 for fiscal 1994 and fiscal 1993, respectively.

The 46% increase in the revenues and the 64% increase in operating profit of this segment in fiscal 1994 as compared to fiscal 1993 are the result of a continued improvement in the economy in the company's markets and more importantly the increased requirements of this segment's largest customer. The margin percentage produced by these operations remained stable despite the continued competition in the Maryland, Washington D. C., and Pennsylvania markets. General and administrative costs remained under control.

Total Company

Consolidated revenues and total operating profit are summarized for the past three years in Item 6, Selected Financial Data. The factors contributing to fiscal 1994's 27% increase in consolidated revenues to \$10,555,000 are discussed above by segment, particularly under the

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technical contract personnel segment. The 62% reduction in the operating profit from \$816,000 in fiscal 1993 to \$311,000 in fiscal 1994 are described above by segment, particularly under the semiconductor equipment segment. General corporate expenses increased by \$7,000, or 3%, due to increased activities related to attempts to expand the Company's business opportunities.

In fiscal 1992 the Company had net interest expense of \$101,000 as approximately 50% of the RTS and Martec receivables were financed by a bank line of credit. With the collection of those receivables and repayment of the line of credit during fiscal 1993, the Company earned net interest income of \$36,000 in fiscal 1993 and \$55,000 in fiscal 1994. The higher interest income in fiscal 1994 was due to having the funds resulting from the collection of those receivables for a full year. As a result, the income from operations before income taxes for fiscal 1994 amounted to \$106,000 compared with \$599,000 in fiscal 1993.

The fiscal 1994 tax provision is significantly less than the 34% federal statutory rate applied to pre-tax income principally due to the \$27,000 benefit of research and development credits and the effects of the settlement of the tax, penalties and interest assessed in a prior year by the IRS. These items are partially offset by the \$20,000 provision for state income and other less significant items. As of September 30, 1994, the valuation allowance for deferred taxes is \$150,000 and results from the Company's limiting its recognition of state deferred tax assets, principally state net operating losses which can be carried forward only five years. Those state deferred tax assets will be recognized in future carryforward periods to the extent of state taxable

As a result of all of the above factors, net income for fiscal 1994 was \$94,000, or \$.10 per share, as compared to \$509,000, or \$.51 per share in fiscal 1993.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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	Consolidated Statements of Stockholders' Investment for the years ended September 30, 1995, 1994 and 1993	F-4
	Consolidated Statements of Cash Flows for the years ended September 30, 1995, 1994 and 1993	F-5
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All Schedules, other than the Schedule listed above, are omitted as the information is not required, is not material or is otherwise furnished.

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REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To AMTECH SYSTEMS, INC.:

We have audited the accompanying consolidated balance sheets of AMTECH SYSTEMS, INC. (an Arizona corporation) and subsidiaries as of September 30, 1995 and 1994, and the related consolidated statements of operations, stockholders' investment and cash flows for each of the three years in the period ended September 30, 1995. 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 generally accepted auditing standards. 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 financial statements referred to above present fairly, in all material respects, the financial position of AMTECH SYSTEMS, INC. and subsidiaries as of September 30, 1995 and 1994, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 1995, in conformity with generally accepted accounting principles.

Our audits were made for the purposes of forming an opinion on the basic financial statements taken as a whole. The schedule listed in the index of financial statements and financial statement schedules 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 the audits 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

Phoenix, Arizona, December 6, 1995, except with respect to the matter discussed in Note 9, as to which the date is December 29, 1995.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS September 30, 1995 and 1994

September 30, 1995 and 1994		
÷ ,	1995	1994
ASSETS		
<\$>	<c></c>	<c></c>
CURRENT ASSETS:		
Cash and cash equivalents (Note 2)	\$ 833,820	\$ 736 , 984
Short-term investments (Note 2)	3,671,569	343,992
Accounts receivable, less allowance		
for doubtful accounts of \$80,000		
in 1995 and \$45,000 in 1994	2,286,743	1,541,945
Inventories (Note 2)	524,071	
Deferred income taxes (Notes 2 and 3)	165,000	129,000
Prepaid expenses	45,392	12,875
Total current assets	7,526,595	
Total current assets		
PROPERTY, PLANT AND EQUIPMENT, at cost (Note 2):		
Leasehold improvements	162,404	124,956
Equipment and machinery	333,971	
Furniture and fixtures	652,607	•
	1,148,982	1,002,614
Less- Accumulated depreciation and amortization	499,184	485,426
	649,798	517,188
PURCHASE PRICE IN EXCESS OF NET ASSETS		
ACQUIRED, at amortized cost (Notes 2 and 9)	85,315	91,303
OTHER ASSETS	103,811	269 , 700
	c 0 365 510	\$ 3,974,922
	========	\$ 3,974,922 ========
LIABILITIES AND STOCKHOLDERS' INVESTMENT		
CURRENT LIABILITIES:		
Accounts payable	\$ 528,322	\$ 297 , 767
Accrued liabilities:	272 202	250 044
Compensation and related taxes	373,383	•
Warranty and installation expenses	116,347	•
Other accrued liabilities	120,239	
Income taxes payable (Notes 2 and 3)	225,000	
Total current liabilities	1,363,291	852 , 103
COMMITMENTS AND CONTINGENCIES (Notes 5, 6, and 8)		
STOCKHOLDERS' INVESTMENT (Notes 7 and 9):		
Preferred stock; no specified terms;		
100,000,000 shares authorized; none issued		
Common stock; \$.01 par value; 100,000,000 shares authorized;		
2,152,851 (945,351 in 1994) shares issued and outstanding	21,529	9,454
Additional paid-in capital	7,872,010	4,260,703
Cumulative foreign currency translation adjustment	29,459	
Accumulated deficit	(920,770)	(1,147,338)
Total stockholders' investment	7,002,228	3,122,819
	\$ 8,365,519	\$ 3,974,922
	========	========

</TABLE>

The accompanying notes are an integral part of these consolidated balance sheets.

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<TABLE> <CAPTION>

CONSOLIDATED STATEMENTS OF OPERATIONS For The Years Ended September 30, 1995, 1994 and 1993

	1995	1994	1993
<s></s>	<c></c>	<c></c>	<c></c>
SEMICONDUCTOR EQUIPMENT:			
Net product sales Cost of product sales	\$ 6,864,068 4,558,675		2,493,108
Gross margin	2,305,393		
Selling and general Photo-CVD project (Note 8)	1,738,344	1,061,852 355,405	900,050
Other Research and development (Note 2) Other expense (income) (Note 6)	231,784	56,573	155,408 (140,549)
Operating profit	335,265	87,210	
GENERAL CORPORATE EXPENSES	295,683	259,858	252 , 979
INTEREST INCOME-NET	(221,471)	(55 , 179)	
INCOME (LOSS) FROM CONTINUING			
OPERATIONS BEFORE INCOME TAXES	261,053	(117,469)	462,390
INCOME TAX PROVISION (BENEFIT) (Notes 2 and 3)	90,000	(28,000)	160,000
INCOME (LOSS) FROM CONTINUING OPERATIONS	171,053	(89,469)	302,390
DISCONTINUED TECHNICAL CONTRACT PERSONNEL:			
Net revenues Cost of revenues	4,547,860 4,005,154	6,224,205 5,596,441	3,810,899
Gross margin	542,706		
Selling and general Litigation and other expense (income) (Note 9)	457 , 191 	404 , 291 	387,914 (80,499)
INCOME FROM DISCONTINUED OPERATIONS BEFORE INCOME TAXES	05 515	223,473	126 200
INCOME TAX PROVISION (BENEFIT) (Notes 2 and 3)	85,515 30,000	40,000	
INCOME FROM DISCONTINUED OPERATIONS		183,473	
NET INCOME		\$ 94,004	
PRIMARY EARNING PER SHARE (Notes 2 and 7): Income (Loss) From Continuing Operations Net Income Average Outstanding Shares	\$.09 \$.12 1,901,426	\$ (.09) \$.10 964,542	\$.31 \$.51 991,262
FULLY DILUTED EARNING PER SHARE (Notes 2 and 7): Income (Loss) From Continuing Operations Net Income Average Outstanding Shares	\$.09 \$.12 1,901,426	\$ (.09) \$.10 964,800	\$.30 \$.50 1,012,694

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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' INVESTMENT Years Ended September 30, 1995, 1994 and 1993

	Common	Stock	Additional	Cumulative Foreign Currency	Total		
	Number of Shares	Amount	Paid-In Capital	Translation Adjustment	Accumulated Deficit	Stockholders' Investment	
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	
BALANCE AT SEPTEMBER 30, 1992	1,032,490	\$ 4,421,157	\$	\$	\$(1,750,012)	\$ 2,671,145	

Net income					508,670	508,670
Repurchase of common stock (Note 9) Reclassification of no	(87,500)	(151,000)				(151,000)
par common stock to \$.01 par value (Note 7)	361	(4,260,703)	4,260,703			
BALANCE AT						
SEPTEMBER 30, 1993	945,351	9,454	4,260,703		(1,241,342)	3,028,815
Net income					94,004	94,004
BALANCE AT						
SEPTEMBER 30, 1994	945,351	9,454	4,260,703		(1,147,338)	3,122,819
Net income					226,568	226,568
Secondary Public						
Offering-Note 7	1,207,500	12,075	3,611,307			3,623,382
Translation adjustment				29,459		29,459
BALANCE AT						
SEPTEMBER 30, 1995	2,152,851	\$ 21,529	\$ 7,872,010	\$ 29,459	\$ (920,770)	\$ 7,002,228
	========	========	========	========	========	========

</TABLE>

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

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<TABLE> <CAPTION>

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS For The Years Ended September 30, 1995, 1994 and 1993

		1995	1994		1993
<\$>			>		
OPERATING ACTIVITIES:					
Net income	\$	226,568	\$ 94,004	\$	508,670
Adjustments to reconcile net income to net					
cash provided (used) by operating activities-					
Depreciation and amortization		144,085	69,395		81,693
Inventory and other asset write-downs		44,796	34,804		39,484
Martec restructuring charge (excess)					(25, 485)
Loss on sale or retirement of assets		31,398	1,314 		18,017
Bad debt expense, net of write-offs		35,632			(20,000)
Deferred tax provision (benefit) Decreases (increases) in operating assets:		(36,000)	(19,000)		42,000
Accounts receivable		(762,669)	63,525	,	000 434
Inventories and prepaid expenses		(702 , 003) (261 863)	(176,651)	2	241 330
Other assets			(211,654)		(17,951)
Increases (decreases) in operating liabilities:		10.,5.0	(211,001)		(1,,001)
Accounts payable		223,091	(101,387)		(442,295)
Accrued liabilities		123,063	(101,387) 22,377		(901,995)
Income taxes refundable/payable		150,000	(160,000)		668,000
Net Cash Provided (Used) By Operating Activities		106,071	(383,273)		2,991,902
INVESTING ACTIVITIES:					
Maturities (purchases) of short-term investments - net	(3,	,327,577)	549,285		(893,277)
Purchases of property, plant and equipment		(328,257)	(476, 135)		(79 , 507)
Proceeds from asset sale		19 , 591	45 , 342		2,333
Net Cash Provided (Used) By Investing Activities	(3,		118,492		(970 , 451)
DININGING AGENTATES					
FINANCING ACTIVITIES: Net proceeds from public offering (Note 9)	3	,623 , 382			
Net advances (payments) on bank line of credit	٠,				L,500,000)
Repurchase of common stock (Note 9)					(151,000)
Net Cash Used By Financing Activities	3,	, 623 , 382			L,651,000)
EFFECT OF EXCHANGE RATE CHANGES		3,626 			
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS (Note 2) CASH AND CASH EQUIVALENTS AT		96,836	(264,781)		370,451

BEGINNING OF PERIOD		736,984	1	1,001,765	631,314
CASH AND CASH EQUIVALENTS AT					
END OF PERIOD	\$	833 , 820	\$	736 , 984	\$ 1,001,765
	===	=======	===		========

</TABLE>

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

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<TABLE> <CAPTION>

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS - CONTINUED

	1995	1994	1993
<pre><s> SUPPLEMENTAL CASH FLOW INFORMATION: Cash paid during the year for:</s></pre>	<c></c>	<c></c>	<c></c>
Interest Income taxes, net of (refunds)	\$ 6,000	\$ 191,000	\$ 9,259 (620,000)
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			

 None | None | None |The accompanying notes are an integral part of these consolidated statements.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
For The Years Ended September 30, 1995, 1994 and 1993

(1) NATURE OF OPERATIONS:

During the three years ended September 30, 1995, Amtech Systems, Inc. and its subsidiaries (the Company) were in two lines of business. The Company manufactures equipment used in the semiconductor manufacturing process. In addition, the Company provided technical contract personnel through its wholly owned subsidiary, a business that was designated as discontinued in October 1995. See Note 9 regarding discontinued operations.

In August 1994, the Company acquired certain assets including rights to use the name Tempress from the bankrupt estate of Tempress B.V. and is in the process of using those assets in the development, manufacture and sale of horizontal diffusion furnaces in the Netherlands. These operations are being conducted through the Company's wholly-owned subsidiary, Tempress Systems, Inc. These financial statements include the results of operations from their commencement on September 26, 1994.

The Company acquired Echelon Service Company (Echelon) as of April 1, 1989. These financial statements include the results of operations of Echelon from the date of acquisition. Since the Company's management has decided to sell the remaining technical contract personnel operations, the results of those operations have been segregated as discontinued operations. See Note 9 for further discussion of the acquisition and sale of this subsidiary.

The Company serves an industry which experiences rapid technological advances and which in the past has been very cyclical. Therefore, the Company's future

profitability and growth depend on its ability to develop or acquire and market profitable new products and its success in adapting to future cyclical reversals, if any.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Basis of Presentation - The accompanying statements include the accounts of Amtech Systems, Inc. and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Revenue Recognition - Revenue is recognized for the semiconductor manufacturing segment on the accrual basis when the product is shipped and title passes to the customers. For the technical contract personnel segment, revenue is recognized on the accrual basis as services are performed by its employees.

Subsequent to September 30, 1992, the Company determined that there were significant problems relative to certain of its EPiC products shipped in 1992. The Company determined it would no longer solicit additional EPiC orders. Approximately \$200,000 of 1992 EPiC shipments were recorded as deferred customer revenue and included in current liabilities as of September 30, 1992. Approximately \$100,000 of 1992 costs associated with these shipments were classified as product development expenses. During 1993, the Company recognized these revenues and, based upon the results of its efforts to correct the problems, established a liability for accrued warranty expenses. As of September 30, 1995, no more EPiC warranty costs are expected and there is no longer a need for a specific warranty reserve for that product.

Cash Equivalents and Short-term Investments - Cash equivalents consists of time certificates of deposit and U.S. treasury bills. For purposes of the consolidated statements of cash flows, the Company considers the certificates of deposit and treasury bills to be cash equivalents if their maturity is 90 days or less from purchase. Maturities greater than 90 days are considered short-term investments, which are recorded at fair value, which approximates cost.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (continued)

Inventories - Inventories are stated at the lower of cost (first-in, first-out method) or market. The components of inventory as of September 30, 1995 and 1994 are as follows:

	1995	1994
Purchased parts	\$323 , 215	\$280,333
Work-in-progress	181,855	51,602
Finished goods	19,001	
	\$524,071	\$331,935
	=======	=======

Property, Plant and Equipment - Maintenance and repairs are charged to expense as incurred. The costs of additions and improvements are capitalized. The cost of property retired or sold and the related accumulated depreciation are removed from the applicable accounts and any gain or loss is recognized.

Depreciation is computed using the straight-line method. Useful lives for equipment, machinery, leasehold improvements are from three to five years and are from three to ten years for furniture and fixtures.

Purchase Price in Excess of Net Assets Acquired - The purchase price in excess of net assets acquired, commonly referred to as goodwill, is being amortized over periods of five to twenty years using the straight-line method.

Product Development Expenses - The Company expenses product development costs as they are incurred. The Company incurred approximately \$232,000 in 1995, \$412,000 in 1994, and \$155,000 in 1993, of expenses related to the improvement of Atmoscan (Note 6) and development of diffusion furnaces and other products.

Foreign Currency Transactions and Translation - Income for fiscal 1995 includes approximately \$11,000 of gains resulting from foreign currency transactions. There were no foreign currency transactions prior to the commencement of operations of Tempress Systems, Inc. The functional currency of Tempress Systems, Inc. is the Netherlands guilder.

Income Taxes - The Company files consolidated federal and state income tax

returns. During 1992, the Company adopted the provisions of the new Statement of Financial Accounting Standards (SFAS) No. 109, "Accounting for Income Taxes." SFAS No. 109 requires deferred income tax assets and liabilities to be computed based upon cumulative temporary differences in financial reporting and taxable income, carryforwards available and enacted tax law. See Note 3.

Income (Loss) Per Common Share - Primary and fully diluted earnings per share in fiscal 1995 are computed using the modified treasury stock method, because the number of warrants and options exceed 20% of the common shares outstanding. For fiscal 1994 and 1993, primary earnings per common share are computed based on weighted average common and common equivalent shares outstanding determined using the treasury stock method. For fully diluted earnings per share, in those years, the number of common equivalent shares used has been calculated assuming that dilutive options were outstanding the full year and that based upon the year-end stock price fewer shares could have been repurchased.

Reclassifications - Certain $\,$ reclassifications $\,$ have been made to the 1993 and 1994 amounts to conform to the 1995 presentation.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(3) INCOME TAXES:

The provision for income taxes on continuing operations consists of:

	1995	1994	1993
Current-			
Federal	\$ 130,000	\$ (13,000)	\$ 140,000
Foreign			
State	2,000		
	132,000	(13,000)	140,000
Deferred-			
Federal	(42,000)	(15,000)	20,000
Foreign			
State			
	(42,000)	(15,000)	20,000
	\$ 90,000	\$ (28,000)	\$ 160,000

The provision for income taxes is different than the amount which would be computed by applying the United States corporate income tax rate to the income before income taxes. The differences are summarized as follows:

<TABLE>
<CAPTION>

	1995	1994	1993
<\$>	<c></c>	<c></c>	<c></c>
Tax provision at the statutory rate	\$ 89 , 000	\$ (40,000)	\$ 157,000
Effect of expenses not deductible for tax reporting			
purposes, primarily amortization of goodwill	13,000	10,000	3,000
State tax provision	54,000	(4,000)	40,000
Research & development credit		(27,000)	
Change in valuation allowance	(52 , 000)	4,000	(40,000)
Other items	(14,000)	29,000	
Actual tax provision	\$ 90,000	\$ (28,000)	\$ 160,000
	=======	=======	=======

</TABLE>

The components of deferred taxes as of September 30, 1995 and 1994 are as follows:

	1995	1994
Allowance for doubtful accounts	\$ 32,000	\$ 19,000
Uniform capitalization of inventory costs	34,000	41,000
Inventory write-downs not currently deductible	38,000	21,000
State net operating loss carryforwards	42,000	116,000

97,000 82,000 (78,000) (150,000) -------\$ 165,000 \$ 129,000

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(3) INCOME TAXES: (continued)

In evaluating the probability of realizing its deferred tax assets, the Company has limited its recognition of deferred tax assets to an amount equal to the expected federal income tax rate of 34% applied to the cumulative temporary differences existing at year end. Deferred tax assets attributable to state net operating losses and the state tax effect of the temporary differences are fully offset by the valuation allowance.

(4) MAJOR CUSTOMERS AND FOREIGN SALES:

During fiscal 1995, the semiconductor equipment had one major customer which accounted for 17% of consolidated revenue. During fiscal 1994, the technical contract personnel segment had one major customer which accounted for 19% of consolidated revenue. The Company had no other customers which accounted for more than 10% of consolidated revenues during fiscal years 1993 through 1995.

The Company had customers in each segment which account for more than 10% of that segment's revenues as follows:

	1995	1994	1993
Semiconductor equipment manufacturing			
segment:	28%	18%	18%
-	11	14	15
		11	
	39%	43%	33%
	====	====	====
Technical contract personnel segment:			
	14%	33%	16%
			14
	14%	33%	30%
	====	====	====

The individual line items above do not reflect the same customers in each year.

All foreign sales were associated with the semiconductor equipment segment. This segment's sales were to the following geographic regions:

	1995	1994	1993
United States (including 1% or less to Canada) Far East (Korea, People's Republic of China,	36%	57%	49%
Taiwan, Japan, and Singapore)	51	26	44
Europe (including Israel)	7	5	7
India	6	12	-
	100%	100%	100%
	====	====	====

(5) LEASES:

The Company leases buildings, vehicles and equipment. Minimum rental commitments under noncancellable operating leases, all of which expire in the next three years, are as follows as of September 30, 1995:

1996	\$ 83,000
1997	44,000
1998	35,000
	\$162,000

Rental expense, net of sublease income, for 1995, 1994 and 1996 was approximately \$140,000, \$119,000 and \$99,000, respectively.

(6) PROPRIETARY PRODUCT RIGHTS:

The Company acquired the proprietary product rights to Atmoscan in 1983, which provides an improved method for the automatic loading of silicon wafers into diffusion furnaces. The Company has agreed to pay the inventor royalties for 17 years from November 23, 1983. Royalties on sales of complete units of the product and any spare parts sold are as follows:

	Unit Sales	Replacement Parts
November 1988 - 1993	8%	4%
November 1993 - 2000	4	2

Royalty expense included in cost of product sales of the semiconductor equipment segment totaled approximately \$49,000, \$63,000 and \$105,000 in 1995, 1994 and 1993, respectively.

The Company had been the plaintiff in a patent infringement action related to Atmoscan. In 1991, the patent infringement action was settled when the U.S. District Court ruled that the Company's patent had been infringed upon by the defendant in the action. The Court ordered the defendant to discontinue infringing upon the Company's patent. In addition, the Company received a \$140,549 recovery in March 1993, from another defendant in this patent infringement matter, which has been recorded as other income.

(7) STOCKHOLDERS' INVESTMENT AND STOCK OPTIONS:

Effective with the close of business on June 4, 1993, each two shares of the no par common stock of the Company was combined and reclassified into one share of \$.01 par value common stock. All shares and per share amounts have been restated to give effect for this two for one reverse stock split. Any fractional shares resulting from the reverse split were rounded to the next highest whole number.

On December 22, 1994, the Company completed a secondary public offering of 1,207,500 shares of its \$.01 par value common stock and redeemable warrants for an equal number of shares. The sale was in the form of units which were comprised of three (3) shares and three (3) redeemable warrants each, and which were sold to the public at a price of \$11.25 per unit. The gross proceeds from the public sale amounted to \$4,528,125. The net proceeds to the Company, after deducting all expenses of the offering, were \$3,623,382.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(7) STOCKHOLDERS' INVESTMENT AND STOCK OPTIONS: (continued)

Each redeemable warrant issued in the offering entitles the holder to acquire one share of the Company's \$.01 par value common stock at an exercise price of \$5.50 per share at any time prior to the December 15, 1999 expiration date. The redeemable warrants are subject to the Company's right of redemption, under certain circumstances, at \$.05 each during the period in which they are exercisable. In connection with the public offering, the Company also sold the underwriting group a warrant ("underwriter's warrant") entitling the group to purchase 35,000 units at a per unit price of \$13.50 during the four year period ending December 15, 1999. In summary, the total number of shares of \$.01 par value common stock issuable under the redeemable warrants and the underwriter's

warrant are 105,000 at a per share price of \$4.50 and 1,312,500 at a per share price of \$5.50.

The Board has reserved a total of 235,000 shares of common stock for use by the 1983 Incentive Stock Option Plan, which is now expired, and the Amended and Restated 1995 Stock Option Plan. Incentive stock options issued under the terms of the plans have or will have an exercise price equal to or great than the fair market value of the common stock at the date the option was granted. Incentive stock option grants expire no later than 10 years from the date of grant, with the most recent grant expiring October 15, 2002. Under the terms of the 1995 Stock Option Plan, nonstatutory options may also be issued. As of September 30, 1995, no options have been granted under the 1995 Stock Option Plan.

The following is a summary of outstanding stock options, 46,500 of which are exercisable, as of September 30, 1995:

	Number of	Exercise	Expiration
Nature of Options	Shares	Price	Date
Directors' options	20,000	\$2.13-\$4.47	90 days after termination
Incentive Stock Option Plan-			
President	7,500	3.52	1996-1998
Other employees	46,000	1.25-5.60	1997-2003
	73,500		
	========		

The Board of Directors adopted the 1995 Stock Bonus Plan under which grants for 26,250 have been made to employees of the Company. Under the terms of those grants, the employees will in fiscal 1996, 1997, and 1998, vest in regards to 9,550, 8,300 and 8,400 shares, respectively. The grants also provide limited tax protection in the form of a cash bonus in the amount of 40% of the market value of the shares on the date of the grant. The shares will be issued and the tax protection paid if the grantee remains an employee through the date on which he or she becomes vested in those shares. Compensation expense is being recorded ratably over the vesting period through the accrual of a liability. Such shares are not reflected in the Consolidated Statements of Stockholders' Investment because the shares have not been issued, pending vesting.

(8) COMMITMENTS AND CONTINGENCIES:

During March 1994, the Company entered into a research and development contract with and paid \$355,405 to the University of California at Santa Cruz (the "University"). That amount was expensed in fiscal 1994. The Company's purpose for entering into the contract is to attempt to prove the feasibility and demonstrate the practical application of the Company's patented photo-assisted chemical vapor deposition ("CVD") process. The University has developed designs and specifications for a prototype model of a product embodying the

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(8) COMMITMENTS AND CONTINGENCIES: (continued)

Company's technology and used it to conduct the initial study. In November 1995, the company amended its contract to extent its term to February 28, 1996, and increase its financial commitment to the research by \$87,000, which will be expensed in fiscal 1996. The purpose of the contract amendment is to prove that deposition rates that are satisfactory for commercial applications can be achieved with the Company's patented method. Assuming the feasibility of the proposed photo CVD product, the Company expects to expend approximately \$3,200,000 for its development. The expenditure is expected to be made in two stages: approximately \$1,700,000 for the development of an initial product suitable for use in research facilities and approximately \$1,500,000 for the development of a product for use in industrial production facilities. These estimates do not include any amount for the expansion of facilities for the manufacture of a new photo CVD product designed for industrial production facilities. Funds for that expansion, if any, are expected to be obtained from cash flow from operations and other sources of financing. There is no assurance of the availability or sufficiency of such sources.

Subsequent to September 30, 1995, the Company entered into a joint venture agreement pursuant to which it would have a 45% ownership interest and a 50% voting interest in Seil Semicon, Inc. in return for a commitment to invest \$500,000 in cash. The joint venturers plan to operate a silicon test wafer reclaiming business through Seil Semicon, Inc., which is in the start-up phase.

The ultimate success of Seil Semicon, Inc. depends on a number of factors, including securing adequate financing, of which there can be no assurance.

(9) DISCONTINUED TECHNICAL CONTRACT PERSONNEL SEGMENT:

The Company entered the technical contract personnel segment in 1988 with the purchase of RTS, Inc. and its affiliates (RTS). In 1989, the Company acquired Echelon Service Company. Martec Resources, Inc., Martec Payroll Services, Inc. and affiliates (collectively Martec) were acquired effective April 2, 1990. All of these acquisitions were culminated using stock and cash at closing as consideration, as well as certain incentive arrangements payable in cash and stock to the former owners. The former owners also became employed under the terms of their respective employment contracts.

On March 6, 1991, the Company terminated for cause the employment of the president (and former owner) of Martec. Martec's former president filed a demand for arbitration as a result of his termination by the Company, seeking damages of more than \$500,000. Although the Company believes that the termination of employment was proper and justified, the Company attempted to settle this matter to avoid further litigation. The expected settlement amount, and the related legal fees involved with the arbitration, were recorded as litigation and other expenses totaling \$469,677 in 1992. On March 26, 1993, a definitive settlement agreement was signed resolving all outstanding claims between the parties. The settlement involved the payment of \$312,500, \$161,500 of which was for release of all claims against the Company and \$151,000 for his return of 87,500 shares of common stock to the Company. The total actual costs were \$25,485 less than expected in 1992 and the reversal of the accrual is included in other income in 1993.

On September 30, 1992, the Company sold substantially all operations related to RTS and Martec. Upon winding up the affairs of RTS and Martec the Company realized \$55,014 more than the carrying value of the net assets retained, which has been included in other income of discontinued operations in 1993.

The "discontinued technical contract personnel" results reflected in the consolidated statements of operations for the three years ended September 30, 1995 are those of Echelon. As of September 30, 1995 and 1994,

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(9) DISCONTINUED TECHNICAL CONTRACT PERSONNEL SEGMENT: (continued)

goodwill net of accumulated amortization related to the acquisition of Echelon amounted to \$85,315 and \$91,303, respectively. Effective December 29, 1995, the Company's management entered into a contract to sell Echelon to its former owner, who is a director of the Company. Specifically, the Company is disposing of approximately \$550,000 in assets and \$90,000 in liabilities and in return will receive shares of the Company's \$.01 par value common stock having a market value of approximately \$800,000.

(10) BUSINESS SEGMENT INFORMATION:

The Company operates in two specific business segments: semiconductor manufacturing equipment and the technical contract personnel business. The following tables summarize and supplement the segment information presented in the accompanying financial statements for the three years ended September 30, 1995, and as of the last day of those fiscal years:

<TABLE>
<CAPTION>

	1995	1994	1993
<s> REVENUES:</s>	<c></c>	<c></c>	<c></c>
Semiconductor Manufacturing Equipment	\$ 6,864,068	\$ 4,331,079	\$ 4,087,886
Technical Contract Personnel Services (C)	4,547,860	6,224,205	4,254,594
Consolidated revenues	\$11,411,928	\$10,555,284	\$ 8,342,480
	=======	=======	=======
OPERATING PROFIT (A): Semiconductor Manufacturing Equipment Technical Contract Personnel Services (C)	\$ 335,265	\$ 87,210	\$ 679,869
	85,515	223,473	136,280
Total operating profit	\$ 420,780	\$ 310,683	\$ 816,149
	======	=======	=======

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IDENTIFIABLE ASSETS: Semiconductor Manufacturing Equipment Technical Contract Personnel Services (C) General Corporate - See (B) below	\$ 3,188,680 608,508 4,568,331	•	\$ 1,503,024 682,094 1,934,810
Total assets	\$ 8,365,519	\$ 3,974,922	\$ 4,119,928
	======	=======	=======
DEPRECIATION AND AMORTIZATION: Semiconductor Manufacturing Equipment Technical Contract Personnel Services (C)	\$ 129,544 14,541	\$ 51,632 17,763	\$ 49,713 31,980
Total depreciation and amortization	\$ 144,085	\$ 69,395	\$ 81,693
	======	======	======
CAPITAL EXPENDITURES: Semiconductor Manufacturing Equipment Technical Contract Personnel Services (C)	\$ 324,119	\$ 460,313	\$ 63,383
	4,138	15,822	16,124
Total capital expenditures	\$ 328,257 ======	\$ 476,135 ======	\$ 79,507

- (A) See the Consolidated Statements of Operations and related notes for details of infrequently occurring items included in operating income.
- (B) General Corporate is primarily excess cash, cash $% \left(1\right) =\left(1\right) +\left(1\right$
- (C) See Note 9 regarding the discontinuance of the Technical Contract Personnel business segment.

</TABLE>

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

FOR THE YEARS ENDED SEPTEMBER 30, 1995, 1994 AND 1993

Additions For the Year Balance at Charged Ended Beginning (Credited) Balance at September 30, of Year to Expense Write-offs End of Year -----1. Allowance for Doubtful Accounts \$ 45,000 \$ 35,704 \$ 704 \$ 80,000 1995 73,720 73,720 1994 45,000 45,000 1,569 21,569 1993 65,000 45,000 2. Deferred Tax Asset Valuation Allowance 1995 \$ 150,000 \$ (72,000) \$ -- \$ 78,000 150,000 ----1994 150,000 256,000 (106,000) --150,000 1993

ITEM 9. DISAGREEMENTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

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PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this Item is incorporated by reference to the Company's Notice of Meeting and Proxy Statement to be filed in connection with the Company's Annual Meeting of Shareholders anticipated to be held on or about February 29, 1996.

ITEM 11. MANAGEMENT REMUNERATION

The information required by this Item is incorporated by reference to the Company's Notice of Meeting and Proxy Statement to be filed in connection with the Company's Annual Meeting of Shareholders anticipated to be held on or about February 29, 1996.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this Item is incorporated by reference to the Company's Notice of Meeting and Proxy Statement to be filed in connection with the Company's Annual Meeting of Shareholders anticipated to be held on or about February 29, 1996.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this Item is incorporated by reference to the Company's Notice of Meeting and Proxy Statement to be filed in connection with the Company's Annual Meeting of Shareholders anticipated to be held on or about, February 29, 1996.

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PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

(a) Financial Statements.

The following is a list of all financial statements filed as a part of this Report:

- 1. Consolidated Balance Sheets September 30, 1995 and 1994
- Consolidated Statements of Operations for the years ended September 30, 1995, 1994 and 1993
- Consolidated Statements of Stockholders' Investment for the years ended September 30, 1995, 1994 and 1993
- Consolidated Statements of Cash Flows for the years ended September 30, 1995, 1994 and 1993
- Notes to Consolidated Financial Statements -September 30, 1995, 1994 and 1993

(b) Financial Statement Schedules

The following is a list of a financial statement schedule required to

1. Schedule II - Valuation and Qualifying Accounts

All schedule other than the Schedule listed above, are omitted as the information is not required, is not material or is otherwise furnished.

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<TABLE>

(c) Exhibits.

<CAPTION>

<caption></caption>		
Exhibit No.	Description	Method of Filing
<s></s>	<c></c>	<c></c>
10.1	Articles of Incorporation	A
10.2	Articles of Amendment to Articles of Incorporation, dated April 27, 1983	А
10.3	Articles of Amendment to Articles of Incorporation, dated May 19, 1987	В
10.4	Articles of Amendment to Articles of Incorporation, dated May 2, 1988	С
10.5	Articles of Amendment to Articles of Incorporation, dated May 28, 1993	G
10.6	Amended and Restated Bylaws	D
10.7	Incentive Stock Option Plan	А
10.8	J.S. Whang Stock Option Agreement	A
10.9	Product Acquisition Agreement	A
10.10	Lease with Elias Paul, dated April 27, 1991	D
10.11	Stock Purchase Agreement with David J. McGrath, Jr., dated September 30, 1992	Е
10.12	Asset Purchase Agreement with TAD Technical Services Corporation, dated September 30, 1992	Е
10.13	Settlement Agreement with the Committee to Protect Shareholder Interests, dated August 25, 1992	F
10.14	Employment Agreement with Robert T. Hass, dated May 19, 1992	G
10.15	Registration Rights Agreement with J.S. Whang, dated January 24, 1994	Н
10.16	Employment Agreement with J.S. Whang, dated October 1, 1994	Н
10.17	Research Agreement with The Regents of the University of California dated March 1, 1994, together with amendments thereto dated March 1, 1994, March 30, 1994, March 7, 1995, June 26, 1995, October 16, 1995, November 29, 1995, and December 4, 1995	*

</TABLE>

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<TABLE>

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Exhibit No.	Description	Method of Filing
\5>		
11	Schedule of Computation of Net Income per Share	I

See Signature Page

</TABLE>

F

_ _____

- Filed herewith.
- Α Incorporated by reference to the Company's Form S-18 Registration Statement No. 2-83934-LA
- Incorporated by reference to the Company's Annual Report on Form 10-K В
 - for the fiscal year ended September 30, 1987
- Incorporated by reference to the Company's Annual Report on Form 10-K C
 - for the fiscal year ended September 30, 1988
- D Incorporated by reference to the Company's Annual Report on Form 10-K
- for the fiscal year ended September 30, 1991 Ε
- Incorporated by reference to the Company's Current Report on Form 8-K, dated October 14, 1992
 - Incorporated by reference to the Company's Annual Report on Form 10-K
- for the fiscal year ended September 30, 1992 G
 - Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1993
- Incorporated by reference to the Company's Form S-1 Registration Н
- Statement No. 33-77368
- Incorporated by reference to the Company's Annual Report on Form 10-K Ι
- for the fiscal year ended September 30, 1994
- (d) Reports on Form 8-K

The Company did not file a Current Report on Form 8-K during the fourth quarter of fiscal year 1995.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMTECH SYSTEMS, INC.

January 12, 1996

By /s/ Jong S. Whang Jong S. Whang, President

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints JONG S. WHANG and ROBERT T. HASS, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Form 10-K Annual Report, and to file the same, with all exhibits thereto, and other documents in connection therewith with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully and to all intents and purposes as he might or could do in person hereby ratifying and confirming all that said attorneys-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<C>

<TABLE> <CAPTION> Signature

Jong S. Whang

Title

Date

<S>

/s/ Jong S. Whang

Chairman of the Board,

President (Chief Executive Officer)

January 12, 1996

January 12, 1996

<C>

/s/ Robert T. Hass

Vice President-Finance

Robert T. Hass	(Chief Financial & Accounting Officer)	
/s/ Donald F. Johnston	Director	January 12, 1996
Donald F. Johnston		
/s/ Eugene R. Hartman	Director	January 12, 1996
Eugene R. Hartman		
/s/ Alvin Katz Alvin Katz	Director	January 12, 1996
/s/ Bruce R. Thaw	Director	January 12, 1996
Bruce R. Thaw		

</TABLE>

RESEARCH AGREEMENT (And Amendments)

This Research Agreement ("Agreement") is entered into by and between AMTECH SYSTEMS INC. ("Sponsor") and THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ("University"), a nonprofit educational institution incorporated under the laws of the State of California.

Witnesseth

WHEREAS, Sponsor possesses an ownership interest in United States Patent No. 5,215,588 entitled "Photo-CVD System" and issued on June 1, 1993 to Ji H. Rhieu of Mesa, Arizona; and

WHEREAS, Sponsor claims existing rights in intellectual property under continuation-in-part to U.S. Patent No. 5,215,588, Patent Application Serial No. 08/067,286, filed on May 25, 1993 (hereinafter referred to as Method A); and

WHEREAS, University claims existing rights in intellectual property whose conception occurred before the period covered by this Agreement, is included in disclosure UC Case No. 93-338-1, and is entitled "Parallel Purge Configuration for Photo-CVD Process (UCSC B)" (hereinafter referred to as Method B): and

WHEREAS, University claims existing rights in intellectual property whose conception occurred before the period covered by this Agreement, is included in disclosure UC Case No. 93-338-1, and is entitled "Perpendicular Purge Configuration for Photo-CVD Process (UCSC C)" (hereinafter referred to as Method C); and

WHEREAS, the research project contemplated by this Agreement is of mutual interest and benefit to University and to Sponsor, will further the instructional, scholarship and research objectives of University in a manner consistent with its status as a nonprofit, tax-exempt, educational institution, and is intended to further the business objectives of Sponsor and to provide benefits to Sponsor through the actual reduction to practice of Method A under this Agreement; and

WHEREAS, in this Agreement the term Improvement Invention shall mean any patentable invention owned by the University which includes or broadens one or more of the claims in Method A and which is conceived and first actually reduced to practice during the course of performing the research under this Agreement; and

WHEREAS, it is anticipated that University will, as a result of the research project, design and build a Photo-CVD (chemical vapor deposition) prototype and it is intended that Sponsor shall receive certain rights to such prototype in accordance with the terms of this Agreement; and

1. Research Work

- University shall use reasonable efforts to perform the Research described in Exhibit A hereto which is incorporated herein, (hereinafter referred to as the "RESEARCH"), under the direction of Roger W. Anderson as "Principal Investigator," substantially in accordance with the terms and conditions of this Agreement. Anything in this Agreement to the contrary notwithstanding, Sponsor and University may at any time amend the RESEARCH by mutual written agreement.
- 1.2 In the event that the Principal Investigator becomes unable or unwilling to continue the RESEARCH, and a mutually acceptable substitute is not available, University or Sponsor shall have the option to terminate this Agreement.
- 1.3 University shall provide all necessary facilities to properly and fully perform the RESEARCH and to construct and test the Photo-CVD prototype.

2. Period of Performance

2.1 The period of performance of this Agreement is March 1, 1994 through April 30, 1995. This Agreement shall become effective upon the date of last signature hereto and shall continue in effect for the full duration of the period of performance unless sooner terminated in accordance with the provisions of

Article 9. Notwithstanding the effectiveness of the Agreement as described herein paragraphs 4.3 and 6.1 shall continue in effect for the periods stated herein.

3. Reports

- 3.1 University shall furnish Sponsor letter reports in such frequency as mutually agreed to by the parties, but no less than monthly, summarizing the work conducted. In addition, on no less than a quarterly basis, University and Principal Investigator shall provide oral presentations in person as to the status of the RESEARCH to Sponsor and Sponsor's guests at the site of the RESEARCH or at Sponsor's offices at Sponsor's request. A final report setting forth the accomplishments and significant research findings, equipment development and plans shall be prepared by University and submitted to Sponsor within thirty (30) days of the expiration of the Agreement.
- . Costs, Billings and Other Support
 - It is agreed to and understood by the parties hereto that, subject to Article 2, total costs to the Sponsor hereunder shall not exceed the amount of \$360,549. Payment shall be made by Sponsor on a reasonable cost reimbursable basis monthly in arrears upon submission of invoices by the University in accordance with the schedules attached hereto as Exhibit B. Invoices submitted by the University shall not vary by more than five percent (5%) of the attached schedules on a quarterly basis.
 - 4.2 Checks shall be made payable to The Regents of the University of California and sent to:

University of California, Santa Cruz Cashier's Office 102 Hahn Student Services Santa Cruz, CA 95064

- 4.3 In the research, development, planning and construction of a photo enhanced CVD prototype used in the processing and manufacturing of semiconductor devices, and in other aspects of the RESEARCH, the equipment and machinery utilized therein shall primarily be provided by Sponsor through the funding of the RESEARCH as described in paragraph 4.1 hereof. In addition, University may be required to utilize some equipment for certain of the components of the prototype and in other aspects of the RESEARCH. Although the University shall retain title to any such equipment and the prototype, it shall be subject to the rights of Sponsor to retain the intellectual property rights derived from the RESEARCH and other rights outlined in Articles 5 and 8 hereof. University shall maintain in good working order and condition the equipment and CVD prototype and shall provide Sponsor with the right of access and noncommercial use of the equipment and prototype on at least a monthly basis for a two year period commencing with the termination of this Agreement. Sponsor shall reimburse University for the cost of chemicals and supplies necessary to process samples for the purpose of demonstrating the equipment and prototype during the period of access by Sponsor.
- 4.4 In the event of termination of this Agreement by Sponsor pursuant to Article 9 hereof, Sponsor shall pay all costs accrued by University as of date of termination, including noncancellable obligations.

Publicity and Business Development

5.

5.1 University understands and agrees that Sponsor is a public corporation and will inform its shareholders and issue a news release that it has entered into this Research Agreement with University for the RESEARCH as described on Exhibit A and for the development, design and construction of photo-enhanced CVD equipment and machinery used in the processing and manufacturing of semiconductor devices. Sponsor shall have the right to visit the

site of the RESEARCH at the University and to demonstrate any achieved results of the RESEARCH and the development, construction and use of the Photo-CVD equipment and machinery developed by University. Principal Investigator will cooperate with Sponsor in this endeavor. Sponsor shall agree that such visits to the research site shall be on a reasonable basis and will not exceed more than one visit per month.

5.2 With the exception of informing shareholders and issuing news releases as described in paragraph 5.1, nothing in this Agreement shall entitle Amtech to use the University's name, nor any employee of University, in any publicity or advertising without the prior written approval of University. University will not use the name of Sponsor, nor any employee of Sponsor, in any publicity without the prior written approval of Sponsor.

6. Confidentiality

- University agrees that information, techniques and methods obtained in and through the RESEARCH and related to the development, design and construction of the Photo-CVD prototype shall be considered Confidential Information. Such Confidential whether provided by Sponsor or Information independently developed by University which is not specifically excepted in paragraph 6.2 hereof, shall be held in strict confidence for the term of this Agreement and for a period of three (3) years after its termination. University agrees to safeguard such Confidential Information against disclosure to others with the same degree of care as it exercises with its own information of a similar nature. University will take all reasonable efforts to prevent disclosure to third parties of such Confidential Information.
- 6.2 University shall not be required to keep confidential the following: (1) information which is now common knowledge or subsequently becomes such through no breach of this Agreement; (2) information which reveals the results of the RESEARCH without disclosing the methods by which the results are obtained; or (3) information which is required to be disclosed by law.

7. Publications

8.

University shall have the right to publish research 7.1 information of general scientific and academic interest so long as said publications do not reveal information University agrees to keep confidential pursuant to Article 6. University shall furnish Sponsor with a copy of any proposed publication at least sixty (60) days prior to submission for publication. Sponsor within thirty (30) days of receipt of the proposed publication shall determine if said proposed publication reveals Confidential Information of Sponsor or would otherwise violate this Agreement. In the event Sponsor determines that its Confidential Information is disclosed in such publication, it shall notify University and such information will be removed from the publication. Unless Sponsor notifies University within said thirty (30) day period, University shall have the right to submit said publication.

Intellectual Property Rights

8.1 Ownership of Inventions

Any patentable invention or discovery invented solely by employees of University arising from research conducted under this Agreement shall be the sole property of University and shall be disposed of in accordance with University's policies subject to the terms of this Agreement. Any patentable invention or discovery invented solely by employees of Sponsor arising from research conducted under this Agreement shall be the sole property of Sponsor and shall be disposed of in accordance with Sponsor's policies subject to the terms of this Agreement.

For any invention or discovery jointly invented by University and Sponsor arising from research conducted under this Agreement, each party shall, in accordance with the patent laws of inventorship, own an undivided interest in the invention. Any and all joint inventions shall be fully and promptly disclosed in writing and in confidence to the other party. The parties agree to consult with one another prior to taking any action to obtain patent protection of such joint invention and shall attempt to agree on patent applications to be filed and such invention to be administered.

Inventorship shall be determined in accordance with $U.S.\ patent\ laws.$

8.2 Licensing Rights to University Inventions

Unless it is determined by a court of competent jurisdiction that University is unable to do so and provided that Sponsor pays the full costs of the research project supported by this Agreement as set forth in the schedules attached hereto as Exhibit B, Sponsor shall be given a time-limited first right to negotiate an exclusive, royalty-bearing license to make, use and sell any patentable invention which is either 1) both (a) included in Method B or Method C and (b) first actually reduced to practice in the performance of research under this Agreement ("Research Invention") or 2) conceived and first actually reduced to practice in the performance of research under this Agreement. This license right shall exclude those using laser or rare gas halogen excimer light sources. It is specifically understood and agreed that Method A shall be the primary focus of this RESEARCH.

University shall promptly disclose to Sponsor in writing and in confidence any such invention or discovery arising under this Agreement; Sponsor shall notify University in writing within ninety (90) days of disclosure to Sponsor whether or not it wishes to secure a commercial license to such invention. If Sponsor elects to secure a license, Sponsor shall assume all costs associated with securing and maintaining patent protection from the date of disclosure through the term of the license for such invention(s), whether or not Letter Patent issues. The parties shall negotiate in good faith said license, which shall include, but not be limited to:

- o reasonable terms;
- o diligence requirements which are no more restrictive than performance by Sponsor to market the product under such license in countries including the United States within twenty-four (24) months of the date of full execution of such license and in quantities sufficient to meet the market demands therefor; and
- o Sponsor's continuing obligation to pay patent
 costs.

Sponsor shall have an additional one hundred twenty (120) days from the date of election to conclude a license agreement with University. If Sponsor does not elect to secure such license or if such license agreement is not concluded in said period, rights to the inventions disclosed hereunder shall be disposed of in accordance with University policies with no further obligation to Sponsor.

Further, the earned royalty rate in any such license to an invention which is an Improvement Invention shall be one-half percent (0.5%) of Net Sales of all products sold under the license. In addition, the earned royalty rate in any such license to an invention which is a Research Invention shall be not less than two percent (2%) and not more than four percent (4%). For Research Inventions which are jointly owned, the specific royalty rate shall reflect the relative contributions of the Sponsor and the University to such joint inventions. Net Sales

shall mean the total of the gross invoice prices of Licensed Product sold less the sum of the following actual and customary deductions where applicable: cash, trade, or quantity discounts, sales, use, tariff, import/export duties or other excise taxes imposed upon particular sales; transportation charges and allowances or credits to customers because of rejections or returns.

8.3 Nothing contained in this agreement shall be deemed to grant either directly or by implication, estoppel, or otherwise any rights under any patents, patent applications or other proprietary interests, whether dominant or subordinate, or any other invention, discovery or improvement of either party, other than the specific patent rights covering inventions arising under this Agreement.

9. Termination

- 9.1 Either party may terminate this Agreement upon thirty (30) days prior written notice to the other.
- 9.2 Termination of this Agreement by either party for any reason shall not effect the rights and obligations of the parties accrued prior to the effective date of termination. No termination of this Agreement, however effectuated, shall affect the University's or Sponsor's rights and obligations under Article 8 thereof, or release the parties hereto from their rights and obligations under Articles 4, 5, 6, 7, 8 and 10.

10. Independent Contractor

- 10.1 In the performance of all services hereunder:
 - 10.1.1 University shall be deemed to be and shall be an independent contractor and, as such, University shall not be entitled to any benefits applicable to employees of Sponsor.
 - 10.1.2 Neither party is authorized or empowered to act as agent for the other for any purpose and shall not on behalf of the other enter into ny contract, warranty, or representation as to any matter. Neither shall be bound by the acts or conduct of the other.

11. Insurance and Indemnification

- 11.1 University warrants and represents that University has adequate liability insurance, such protection being applicable to officers, employees and agents while acting within the scope of their employment by University, and University has no liability insurance policy as such that can extend protection to any other person.
- 11.2 University shall defend, indemnify and hold Sponsor, its officers, employees, or agents harmless from and against any and all liability, loss, expense, attorneys' fees or claims for injury or damages arising out of the performance of this agreement, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of University, its officers, agents, or employees.
- 11.3 Sponsor shall defend, indemnify and hold University, its officers, employees, or agents harmless from and against any and all liability, loss, expense, attorneys' fees or claims for injury or damages arising out of the performance of this Agreement, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of Sponsor, its officers, agents, or employees.

- 12.1 This Agreement shall not be assigned by either party without prior written consent of the parties hereto excepting so far as Amtech may transfer all rights and duties under this Agreement to its successor in interest.
- 13. Agreement Modification
 - 13.1 Any agreement to change the terms of this Agreement in any way shall be valid only if the change is made in writing and approved by mutual agreement of authorized representatives of the parties hereto.
- 14. Notices
 - 14.1 Any notices given under this Agreement shall be in writing and delivered by first-class mail, postage prepaid, or by overnight courier service addressed to the parties as follows:
 - 14.1.1 For Sponsor:

J. S. Whang, President Amtech Systems, Inc. 131 South Clark Drive Tempe, AZ 85281

14.1.2 For University (contractual):

Mark S. Coburn Contracts and Grants Office University of California, Santa Cruz 399C Applied Sciences Building Santa Cruz, California 95064

14.1.3 For University (technical):

Roger W. Anderson Board of Studies in Chemistry University of California, Santa Cruz 1156 High Street Santa Cruz, California 95064

- 15. Entire Agreement
 - 15.1 This Agreement constitutes the entire understanding between the parties hereto and there are no collateral, oral or written agreements or understandings. This Agreement supersedes any prior oral or written agreement or understanding between the parties.

IN WITNESS WHEREOF, the parties have executed this Agreement in two or more counterparts, each as an original and all together as one instrument as of the date of last signature below written.

AMTECH SYSTEMS, INC. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

 By /s/J. S. Whang
 By /s/ Mark S. Coburn

 Name
 J. S. Whang

 Name
 Mark S. Coburn

Title President Title Contracts and Grants Manager

Date 3-2-94 Date 2-28-94

Date 2-28-94

EXHIBIT A RESEARCH WORK

A Proposal From

The Regents of the University of California

to

Principal Investigator: Roger W. Anderson Professor of Chemistry University of California Santa Cruz, CA 95064

Abstract

This proposal is for the development of a single wafer/flatpanel photo-CVD tool. Silicon oxide and silicon nitride depositions will be demonstrated and characterized. The photo-CVD tool will be very useful for thinfilm depositions for integrated circuit applications, for flat panel displays, and for solar panel applications. This proposal is for the time period 1 Jan 1994 to 28 February 1995. The proposal is for \$360,549 in direct and indirect costs. The University of California cost sharing is \$165,400 in equipment.

Proposal

This proposal from the Regents of the University of California to Amtech Systems Inc is for a grant to support work in the laboratory of Professor Roger W. Anderson that will develop a photo-CVD tool. The goal of the research and development work will be the design and characterization of a photo-CVD tool that will provide a variety of thinfilm depositions with good thickness uniformity and convenient process control.

Attached to this proposal are the following items: Work plan for photo-CVD equipment development; Time line for photo-CVD equipment; Detailed budget including salaries, supplies, and equipment; Equipment justification; and a burn rate estimate. The cumulative monthly totals will not be exceeded for a given month. The Photo-CVD Prospectus and CV for Roger W. Anderson have been forwarded to Amtech in October. The background and context for this proposal is described in the Prospectus.

The grant will provide salaries, benefits, and overhead for the R&D team who will develop the photo-CVD tool. The grant will also purchase required equipment for the tool development, and the components of the prototype. The grant will also provide a budget for expendable supplies. Much detail is provided in the attached budget pages.

Large identified budgetary items are for salaries. I will head up the project, but two post-doctoral people will be hired to do most of the design and process development work. The grant will also support one graduate student for one year, and one graduate student for the summer of 1994.

The overall work product will be AUTOCAD designs for the Photo-CVD tool and the test results for all designs that were built. The research effort is likely to result in the optimal design for a single wafer Photo-CVD tool. In particular the research effort will provide a good solution to the problem of coating optics in photo-CVD depositions. The photo-CVD prototype will provide simple evaluation of different purge configurations that can solve this problem. The purge configuration described in the Amtech patent will be the primary focus of this work.

The photo-CVD tool will be designed to deposit thinfilms on a single substrate up to 200 mm in width. The substrates will be loaded by opening one end of the chamber. The design will allow convenient use of a variety of conventional UV lamps as well as excimer lasers. The first testing of the photo-CVD tool will simply use low pressure mercury lamps to photolyze metal carbonyl molecules. The resulting metallic coatings will be provide a good evaluation of both the purge technology and the deposition uniformity. The photo-CVD tool will be built utilizing UV lamps that provide illumination over a long narrow region, and the lamps may provide cw or pulsed light. The illuminated region on the wafer has quite small area but the long direction of the illumination is long enough to extend the width of the substrates. Use of a small illuminated region minimizes the necessary purge gas flow, and this will greatly help provide deposition uniformity across the width of the substrate. Uniformity over the entire substrate will be obtained using several UV lamps for the Amtech purge configuration or by moving the substrates in the direction perpendicular to the length of the photolysis lamps. The length of the motion will be made large enough to allow convenient loading and unloading of the substrates. After the tool is producing uniform depositions with the low intensity conventional UV sources, it will be with the use of an excimer laser as the source of UV photons. The photo-CVD tool will also include some in-situ thinfilm measurements that will greatly speed up process development. The process parameters (gas composition and pressure, temperature, and scan rate) will be computer controlled.

It should be easy to market copies of the UCSC developed photo-CVD tools to R&D laboratories of the semiconductor industries. Once the industry accepts the technology, the photo-CVD technology can be repackaged for use with the cluster tools of various semiconductor equipment companies.

WORK PLAN for Photo-CVD development

(Note: This assumes a starting date of 15 February 1994. For a later starting date add the delay to these dates.)

Start 15 February 1994

Order AUTOCAD computer system. 20 February 94: start 2 postdoctoral positions on 25 April 94.

Task I: Finish 26 April 1994

Machine drawings for photo-CVD vacuum chamber, drawings for substrate heated stage, bids and order for vacuum chamber construction, quotations and orders for vacuum pumps, pressure gauges, vacuum feedthroughs, heaters, temperature controllers, linear motion and sensing, vacuum stand, fasteners and seals, venting and electrical for vacuum pumps. Preliminary value engineering.

Task II: Finish 5 August 1994

Order control computer and interface, power supplies. Assemble and test vacuum chamber, test translation and heating of substrate stage. Specify and order gas tray with MFCs and valves. Write preliminary version of control software. Design the patented Amtech purge configuration into hardware as the first purge configuration and specify conventional UV light source. Refine value engineering. Silane facilitization of laboratory.

Task III: Finish 9 November 1994

Construct bubbler for metal carbonyls, construct chamber exhaust metal carbonyl destroyer for safety. Assemble simple in-situ thinfilm thickness monitor. Install RGA. Test Amtech purge configuration. Determine effect of process and purge gas flow and temperature on thinfilm uniformity. Test horizontal purge design. Test other purge configurations if necessary.

Task IV: Finish 18 April 1995

Demonstrate silicon oxide and silicon nitride depositions with low pressure mercury lamp and excimer laser irradiation. Proceed with flashlamp and mercury sensitization. Refine AUTOCAD drawings and part lists. Final Report.

Interim progress reports:

Short reports will be submitted on the first of every month during the project, and summary reports will be submitted at the finish date for each task. Trips to Amtech will be made at the conclusion of tasks II, III, and IV.

AUTOCAD files, parts lists

 ${\tt AUTOCAD}$ files and parts lists including vendors and prices will be available at the conclusion of tasks III and IV.

<TABLE>

PHOTO CVD TOOL

<CAPTION>

Task Name	Responsible	Start	Duration	End
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>
Design Prototype		15/Feb/94	105.00 d	20/Jul/94
Specify/delivery of AUTOCAD computer	RWA	15/Feb/94	15.00 d	08/Mar/94
Recruit for 2 postdocs		15/Feb/94	45.00 d	22/Apr/94
Order Vacuum Pumps, pressure gauges	RWA	15/Feb/94	2.00 d	16/Feb/94
Order ellipsometer		17/Feb/94	2.00 d	18/Feb/94
Drawings for Vacuum Chamber	RWA	09/Mar/94	20.00 d	06/Apr/94
Drawings for Substrate heated stage	RWA	07/Apr/94	5.00 d	14/Apr/94
Order vacuum feedthroughs	RWA	25/Apr/94	1.00 d	25/Apr/94
Order heaters, temperature controlle	rs RWA	26/Apr/94	1.00 d	26/Apr/94
Order linear motion equipment	RWA	27/Apr/94	1.00 d	27/Apr/94
Order vacuum stand	RWA	15/Mar/94	5.00 d	21/Mar/94
Laboratory facilities	RWA	09/Mar/94	90.00 d	20/Jul/94
Order fasteners and seals	RWA	07/Apr/94	5.00 d	14/Apr/94
Postdocs arrive		25/Apr/94	1.00 d	25/Apr/94
Task I		26/Apr/94	0.00 d	26/Apr/94
Assemble Prototype		27/Apr/94	70.00 d	05/Aug/94
Take delivery of ordered items		27/Apr/94	1.00 d	27/Apr/94
Specify and build gas tray	PD1	27/Apr/94	20.00 d	25/May/94
Specify and build bubbler	PD1	26/May/94	13.00 d	14/Jun/94
Design and construct first purge	PD2	27/Apr/94	35.00 d	16/Jun/94
Construct exhaust conditioner	PD2	15/Jun/94	15.00 d	06/Jul/94
Assemble and test vacuum chamber	PD1	15/Jun/94	36.00 d	04/Aug/94
Test translation and heating	PD2	07/Jul/94	22.00 d	05/Aug/94
Order control computer	Grad	27/Apr/94	5.00 d	03/May/94
Construct computer interface	Grad	04/May/94	15.00 d	25/May/94
Write control software	Grad	26/May/94	30.00 d	08/Jul/94
Order, delivery of gases/chemicals	Grad	11/Jul/94	20.00 d	05/Aug/94
Order Hg lamps, mount, power supply	RWA	17/May/94	5.00 d	24/May/94
Task II		05/Aug/94	0.00 d	05/Aug/94

Purge and process tests		21/Jun/94	131.65	d	30/Dec/94
Assemble in-situ thickness monitor	PD1	05/Aug/94	15.00	d	26/Aug/94
Install RGA	PD2	05/Aug/94	15.00	d	26/Aug/94
Test lamps and optics	Grad	05/Aug/94	15.00	d	26/Aug/94
Test first purge with NI(CO)4	PD1	26/Aug/94	5.00	d	02/Sep/94
Determine, process effects	PD1	02/Sep/94	20.00	d	03/Oct/94
Analyze NI films	Grad	26/Aug/94	53.50	d	15/Nov/94
Build 2nd purge configuration	PD2	02/Sep/94	17.50	d	28/Sep/94
Test 2nd configuration	PD1	03/Oct/94	25.00	d	09/Nov/94
Design water cleaning module	PD1	09/Nov/94	34.50	d	30/Dec/94
Design excimer laser optics	Grad2	21/Jun/94	33.00	d	05/Aug/94
Research pulsed light sources	Grad2	08/Aug/94	27.00	d	14/Sep/94
Design Hg sensitization process	Grad	15/Nov/94	20.00	d	14/Dec/94
Modifications indicated during Task III	PD2	28/Sep/94	27.00	d	07/Nov/94
Task III		09/Nov/94	0.00	d	09/Nov/94
Oxide and Nitride Process		09/Nov/94	103.32	d	18/Apr/95
Demonstrate silicon oxide w/Hg lamps	PD2	09/Nov/94	34.00	d	30/Dec/94
Analyze lamp oxide samples	PD2	30/Dec/94	20.00	d	02/Feb/95
Demonstrate silicon nitride w/Hg lamps	PD1	30/Dec/94	25.00	d	10/Mar/95
Demonstrate silicon oxide with laser	PD2	02/Feb/95	25.00	d	10/Mar/95
Analyze laser oxide samples	PD2	10/Mar/95	20.00	d	07/Apr/95
Demonstrate silicon nitride with laser	PD1	10/Mar/95	20.00	d	07/Apr/95
Analyze laser nitride samples	PD1	07/Apr/95	4.00	d	18/Apr/95
Design flash lamp source	Grad	14/Dec/94	78.82	d	12/Apr/95
Revise drawings	RWA	10/Mar/95	22.50	d	11/Apr/95
Final Report	RWA	06/Apr/95	5.00	d	18/Apr/95
Task IV		18/Apr/95	0.00	d	18/Apr/95

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DETAILED BUDGET: 03/0	1/94 - 04/30/9	5		F	EXHIBIT B RESEARCH BUDGET
BUDGET CATEGORY			AMTECH	UCSC	C TOTAL
A. SENIOR PERSONNEL					
1. Principal Inves	tigator (PI)				
Dr. Roger And			21,576	0	21,576
Total Senior Person	nel		21,576	0	21,576
B. OTHER PERSONNEL					
1. Postdoctoral Re To Be Selecte 100% time 12			26,742	0	26,742
2. Postdoctoral Re	searcher				
To Be Selecte 100% time 12	ed .00 mos ea yr		26,742	0	26,742
3. Graduate Studer	t Researcher (GSR)			
To Be Selecte 1 50% time 9	ed 0.00 acad mos		10,173	0	10,173
4. Graduate Studer	t Researcher (GSR)			
To Be Selecte 2 50% time 3	ed .00 sum mos		7,722	0	7,722
5. Undergraduate S	tudent Assista	nts			
274 hours aca	d mos		1,404	0	1,404
Total Other Personn	el		72,783	0	72,783
TOTAL SALARIES AND	WAGES		94,359	0	94,359
C. FRINGE BENEFITS (resp ea yr	Yr 1	Yr 2			
1. P.I.'s acad mos 2. P.I.'s sum mos 3. P.I.'s OASDI 4. Postdoctoral	3.40%		0 734 506	0 0 0	0 734 506
Researcher 5. Specialist 6. GSR acad mos		19.00%	4,947 4,947 228	0 0 0	4,947 4,947 228

and fees		8.	GSR sum mos USA acad mos Tuition remission		ea yr ea yr	173 31	0	173 31
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			_	5				
		Flop	ppy disks 8 backup tap		al misc	supplies		

DIRECT SUPPLY TOTAL \$20,200

Page 1

equipm	ent 1.

				equipment 11	
		CVD TOOL			
ΕÇ	QUIP.	MENT (no indirect costs)		Amtech	UCSC
			Total w/o tax, s Total w/tax, shi		\$165,400
1.	Au	tocad Computer System			
		486 DX2/66 Computer	\$2,400		
		Multiscan monitor AutoCad software	\$1,000 \$1,000		
		Printer	\$1,400		
		Total CAD sy	ystem \$5,800	\$5,800	
2.	Pho	to-CVD Tool			
	A.	General Facility		\$2,000	\$500
		Stand for Vacuum Chamber	\$1,000		Ċ E O O
		Electronics/computer racks Vent, electrical for vac pun	\$1,000		\$500
		_			
	В.	Vacuum Chamber Main vacuum enclosure	\$15,000	\$22 , 000	\$2 , 500
		Electrical feedthroughs	\$1,000		\$500
		Motion feedthroughs	\$1,000		\$1,000
		Gas feedthroughs	\$1,000		\$1,000
		Flanges for lamp mounting Flange for substrate loading	\$2,000 \$1,000		
		Fasteners and seals	\$1,000		
	С.	Vacuum pumping and general gaud	aina	\$24,800	\$26,200
	•	Mechanical pump 36.7 CFM	99	421/000	\$5,000
		Roots/Mech pump 179 CFM	\$13 , 300 \$700		6700
		2 Foreline traps 5 Bellows vacuum valves	\$2 , 800		\$700 \$700
		SS flex tube/Fittings	\$2,000		
		Butterfly valve 4 Baratrons	\$2,000		\$2,500
		Adaptor pressure control	\$2,000		\$2 , 000
		Gate Valve			\$4,200
		Cryopump Compressor			\$5,000 \$5,000
		Flexline			\$600
		Vacuum Collars - Cryopump	\$2,000		\$500
		Ionization Gauge			\$500
	D.	Substrate stage	\$6,000	\$6,000	\$4,000
		Linear bearings, material			
			Page 1		
		Translation mechanism (motor Position sensing	or air)		
		Heater and temperature control	ol		\$1,000
		Stepper Motor Control			\$3,000
	Ε.	Process Gas control		\$23,820	\$26 , 700
		10 Mass flow controllers	\$4,800		\$10,000
		2 MFM 20 Filters	\$1,620 \$1,300		
		32 Bellows sealed valves	\$1,000		\$7,200
		VCR fittings	\$1,200		\$1,000
		Computer solenoid valves Differential Baratron gauge	\$1,000		\$1,500
		Gas heating	\$1,000		
		Gas Regulators Stainless steel tubing	\$2 , 000 \$200		\$6,000
		Bubbler for liquid reactant	\$4,000		\$1,000
		2 Five Channel MFC control	\$3,700 \$2,000		
		Pressure readout	\$2,000		
	F.	Photolysis lamp assembly, light		\$30,000	\$71,000
		Materials, quartz, contruc Purge control	\$18,000 \$2,000		
		rarge concret	Y2,000		

Lamps/power supplies Excimer laser	\$10,000		\$1,000 \$70,000
G. 486 Computer For Process Control A/D and D/A for MFCs A/D for pressure sensing Interface for temperature control Interface for substrate scanning	\$4,800	\$4,800	\$500
5, +15,-15, 24 volt power supplies			\$500
H. Enhancements RGA In-situ thickness monitorir	\$2,000 \$3,000	\$5,000	\$31,000 \$30,000 \$1,000
I. Safety Equipment Hazardous gas sensing Burn box/Scrubber Facilitize Lab for silane use	\$1,500 \$2,000 \$8,000	\$11,500	\$3,000 \$3,000
J. Thinfilm Analysis Equipment Ellipsometer	\$9 , 500	\$9,500	

Page 2

Photo-CVD Equipment Justification

This document provides additional comments about the equipment budget items.

1. Autocad Computer System

This computer system and laser printer will be used to design the photo-CVD equipment and the microwave excited rare gas/halogen light source, and to make the machine drawings necessary for their construction. These files will be sent to Amtech at the conclusion of Tasks III and IV.

2. Photo-CVD Equipment

A. General Facility

This budget item will provide the stand for the equipment and pay for the electrical connections and venting of the equipment and vacuum pumps. The UCSC contribution is for an electronic rack

B. Vacuum Chamber

This budget item will provide the basic vacuum chamber and its flanges and connections to the outside world. Once the main chamber design is fixed, a decision will be made whether the chamber should be machined from solid aluminum blocks, hydroformed, or welded from smaller pieces. The UCSC contribution is for various feedthroughs.

C. Vacuum pumping and general gauging

The 36.7 vacuum pump (LH D60A) will be used for cryopump backing and roughing down the main vacuum chamber. This pump is contributed by UCSC. The 179 CFM roots blower/mechanical pump is necessary for process exhaust. A large capacity for exhaust is required because of the substantial gas flow that will be used for optical window purge. A roots blower will provide the necessary volumetric flow at pressures up to 10 torr. It may be possible to purchase this item on the surplus equipment market. The foreline traps are required to reduce backstreaming of pump oil into the chamber. The bellows valves are required for cryopump foreline and process exhaust. The stainless steel flexible tubing and the fittings are required to connect the mechanical pumps. The butterfly valve will be used for process pressure control. Input to the control unit (Adaptorr) will be made from one or more of the capacitance manometers (Baratrons). The gate valve, cryopump, compressor, and flexline are contributed by UCSC and are required to provide a low base pressure in the chamber. This is necessary for substrate surface preparation and for the satisfactory deposition of metallic coatings. The vacuum collars are required to connect the gate valve and the cryopump to the vacuum system. The ionization gauge will monitor the base pressure.

D. Substrate stage

The substrate stage must be heated and precisely moveable. Linear bearings, position sensing, heaters and controllers are necessary. The UCSC contribution is for Anaheim stepper motor controllers and for temperature controllers.

E. Process Gas control

This is a very important item as it will provide the proper process gas mixtures and the proper amount of purge gas that is necessary. Seven of the ten mass flow controllers will be contributed by UCSC. The mass flow meters are necessary to provide on line calibration of the MFCs.

UCSC can contribute many of the bellows sealed valves and regulators for gas cylinders. The differential Baratron gauge will be used for process and purge gas pressure control, it exists already at UCSC. The main expense for the bubbler is a refrigerated bath and machine shop time. UCSC can contribute valves and other fittings. The MFC control and pressure readout will provide manual as well as computer control of process conditions.

F. Photolysis lamp assembly, light sources

This is probably the most important budgetary item. This budget subheading will fund the different implementations of purge and light sources. The construction budget should allow testing of as many as three purge designs. The purge control budget will provide special machining of parts to provide optimum separation of the purged and process regions. The lamp and power supply budget will provide low pressure mercury lamps of both standard and special 185 nm optimized types. The power supply budget will also provide the possibility of DC operation of the mercury lamps that has been shown to provide better efficiency in the UV. Flash lamps and power supplies can also be purchased. The UCSC contribution includes power supplies and use of an excimer laser.

G. 486 Computer for Process Control

This computer will have analog/digital and digital/analog interfaces for process control. It will also interface with the MFC control units and the Adaptorr pressure controller. The process control software will be written in C.

H. Enhancements

The RGA is necessary to check process gas composition, to check purge efficiency, and to look for leaks. UCSC has a LH IQ200 RGA with turbo mechanical pumps. However it needs some repair work which would be the Amtech contribution. The In-situ thickness monitor will probe deposition thickness by measuring reflection and/or transmission through thin films. A laser and a photodetector are required. UCSC can contribute optical mounts and mirrors.

I. Safety Equipment

This item will provide hazardous gas sensing, and post-process gas treatment. Venting must be provided in the UCSC laboratories to use silane.

J. Thinfilm Analysis Equipment

An ellipsometer is required to provide the thickness and index of refraction of deposited silicon dioxide and nitride thinfilms. This equipment does not presently exist at UCSC and must be acquired. This price if for a used automatic ellipsometer.

The UCSC campus has excellent FTIR facilities however that can be used for routine analysis of silicon oxide and nitride thin films.

<TABLE>

Burn Rate for Photo-CVD Equipment and Process

<CAPTION>

MONTH	SALARY	EQUIPMENT	SUPPLIES	TRAVEL	OTHER	MONTH TOT.	CUMULATIVE
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Feb-94	\$ 0	\$ 10,000	\$ 764	\$ 0	\$ 299	\$ 11,063	\$ 11,063
Mar-94	\$ 1,354	\$ 34,660	\$ 764	\$ 0	\$ 261	\$ 37,039	\$ 48,103
Apr-94	\$ 1,354	\$ 50,013	\$ 764	\$ 517	\$ 522	\$ 53,170	\$101,273
May-94	\$ 11 , 175	\$ 13 , 970	\$ 2,293	\$ 0	\$ 522	\$ 27 , 960	\$129,234
Jun-94	\$ 9,821	\$ 18,172	\$ 2,293	\$ 517	\$ 522	\$ 31,325	\$160,559
Jul-94	\$ 22,905	\$ 19,690	\$ 2,293	\$ 0	\$ 522	\$ 45,411	\$205,969
Aug-94	\$ 22,905	\$ 3,850	\$ 2,293	\$ 517	\$ 522	\$ 30,088	\$236,057
Sep-94	\$ 20,963	\$ 3,300	\$ 2,293	\$ 0	\$ 522	\$ 27,079	\$263,136
Oct-94	\$ 9,821	\$ 3,300	\$ 2,293	\$ 517	\$ 522	\$ 16,453	\$279,589
Nov-94	\$ 9,821	\$ 2,750	\$ 2,293	\$ 0	\$ 522	\$ 15,386	\$294,975
Dec-94	\$ 9,821	\$ 0	\$ 2,293	\$ 2,141	\$ 522	\$ 14,777	\$309,752
Jan-95	\$ 9,821	\$ 0	\$ 2,293	\$ 0	\$ 522	\$ 12,636	\$322,388
Feb-95	\$ 9,821	\$ 0	\$ 2,293	\$ 0	\$ 522	\$ 12,636	\$335,024
Mar-95	\$ 9,821	\$ 0	\$ 2,293	\$ 0	\$ 522	\$ 12,636	\$347,660
Apr-95	\$ 9,821	\$ 0	\$ 2,293	\$ 514	\$ 261	\$ 12,889	\$360,549

AMTECH SYSTEMS, INC.

March 1, 1994

Mr. Mark S. Coburn Contracts and Grants Office University of California, Santa Cruz 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

I have signed the Research Agreement previously executed by you. However, in reviewing it one final time I wanted to be sure of your understanding in Paragraph 4.3 that the phrase "during the period of access by Sponsor" commences upon termination of the fourteen month term of this agreement. In Paragraph 8.2, the phrase "that sponsor pays full cost", means that sponsor's full cost of the research project under this agreement is \$360,549.00. And in Paragraph 14.1.1, Amtech's address is 131 South Clark Drive. Please execute this letter in the space provided confirming your understanding.

I look forward to a mutually beneficial and enjoyable relationship with the University of California.

Sincerely,

/s/J.S. Whang J.S. Whang President

JSW:cb

As discussed with you on March 2, 1994 the points above, except for the fourth sentence referencing "Research Inventions," are confirmed as our understanding.

APPROVED AND EXECUTED BY:

/s/Mark S. Coburn

3-2-94

- -----

Mark S. Coburn

AMTECH SYSTEMS, INC.

March 30, 1994

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

The purpose of this letter is to confirm and to reduce to writing the agreement of Amtech Systems, Inc. ("Sponsor") and The Regents Of The University of California ("University") to modify the Research Agreement between them dated March 2, 1994, as provided below.

Section 4.1 shall be modified as follows:

The total cost to the Sponsor shall not exceed \$355,405 payment of which shall be made in full prior to March 31, 1994.

Section 9.1 shall be amended to read as follows:

Sponsor may terminate this Agreement upon thirty (30) days prior written notice to the University.

Nothing in this letter in any way affects any of the other provisions of the Research Agreement or any of the obligations of either of the parties

thereunder.

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/J.S. Whang J.S. Whang, President

JSW:cb

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Mark Coburn

Mark S. Coburn

Their: Contracts and Grants Manager

FAX

Contracts and Grants Office 399C Applied Sciences Building University of California, Santa Cruz Santa Cruz, CA 95064 tel; (408) 459-4114

fax; (408) 459-4989

email: mcoburn@ucsco.ucsc.edu

To: J.S. Whang

Organization: Amtech Systems, Inc.

Jiganizacion: Amitech Systems, inc.

FAX No: (602) 968-3763

Date: March 30, 1994

Mark Coburn

Number of pages (including this cover page): 2

Message: J.S., please send back a copy

with your signature for our

records. Thanks.

Please notify us if this document was not properly received.

From:

AMTECH SYSTEMS, INC.

March 7 1995

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

The purpose of this letter is to confirm and to reduce to writing the agreement of Amtech Systems, Inc. ("Sponsor") and The Regents Of The University of California ("University") to modify the Research Agreement ("Agreement") between them dated March 2, 1994, as provided in Section 1.1 and below.

WHEREAS, the Work Plan included as a part of Exhibit A to the Agreement reflects a planned start date of February 15, 1994 and the actual start date for the Research was April 15, 1994; and

WHEREAS, the same Work Plan reflects that two (2) post doctoral positions were to be filled on April 25,1994 and the actual dates that the post doctorates arrived at the University were June 20 and June 27, 1994.

NOW, THEREFORE, the first sentence of Section 2.1 is hereby modified to read, "The period of performance of this Agreement is April 15, 1994 through June 30, 1995."

Nothing in this letter in any way $\mbox{ modifies any of the other }\mbox{ provisions }\mbox{ of the Research Agreement.}$

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/J.S. Whang J.S. Whang, President

JSW:rh

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/Mark Coburn

Their: Contracts and Grants Manager

AMTECH SYSTEMS, INC.

June 26, 1995

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

The purpose of this letter is to confirm and to reduce to writing the agreement of Amtech Systems, Inc. ("Sponsor") and The Regents Of The University of California ("University") to modify the Research Agreement ("Agreement") between them dated March 2, 1994, as provided in Section 1.1 and below.

Because of the resignation of Ji Ding and the fact that it is not feasible to hire another talented postdoc for this project for the remaining months of Ji's position, we hereby agree to an extension of our agreement through October 15, 1995.

NOW, THEREFORE, the first sentence of Section 2.1 is hereby modified to read, "The period of performance of this Agreement is March 1, 1994 through October 15, 1995."

It is understood that this extension involves no additional cost to Amtech Systems, Inc., the Sponsor.

Nothing in this letter in any way $\,$ modifies any of the other $\,$ provisions $\,$ of the Research Agreement.

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/J.S. Whang J.S. Whang, President

JSW:rh

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Bv: /s/Karen Ann Reinero

Their: Contracts and Grants Manager

October 16, 1995

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

The purpose of this letter is to confirm and to reduce to writing the agreement of Amtech Systems, Inc. ("Sponsor") and The Regents Of The University of California ("University") to modify the Research Agreement ("Agreement") between them dated March 2, 1994, as provided in Section 1.1 and below.

Because of delays in the performance of this project, we hereby agree to an extension of our agreement through November 15, 1995.

NOW, THEREFORE, the first sentence of Section 2.1 is hereby modified to read, "The period of performance of this Agreement is April 15, 1994 through November 15, 1995."

It is understood that this extension involves no additional cost to Amtech Systems, Inc., the Sponsor.

Nothing in this letter in any way $\mbox{ modifies any of the other }\mbox{ provisions }\mbox{ of the Research Agreement.}$

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/J.S. Whang J.S Whang, President JSW:rh

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

ву:				
Thei	r:			

AMTECH SYSTEMS, INC.

November 29, 1995

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Dear Mr. Coburn:

The purpose of this letter is to confirm and to reduce to writing the agreement of Amtech Systems, Inc. ("Sponsor") and The Regents Of The University of California ("University") to modify the Research Agreement ("Agreement") between them dated March 2, 1994, as provided in Section 1.1 and below.

Because of delays in the performance of this project, and to allow time to complete the NIQ work to demonstrate the potential of these lamps for Photo-CVD processes by January 31, 1996, and to possibly facilitate augmentation of the budget beyond the NIQ phase, we hereby agreed to an extension of our agreement from November 15, 1995 to October 31, 1996.

Section 4.1 shall be modified as follows:

The total cost to the Sponsor shall not exceed \$441,620, an increase of \$86,215 over the initial contract amount, to demonstrate the effectiveness of

the NIQ lamps. It is expressly understood that this increase includes salaries of support staff through February 28, 1996 and 1.5 months of salary for Roger Anderson, Phd. for the summer months of calendar year 1996.

NOW, THEREFORE, the first sentence of Section 2.1 is hereby modified to read, "The period of performance of this Agreement is April 15, 1994 through October 31, 1996."

It is understood that this extension involves no additional cost to Amtech Systems, Inc., the Sponsor beyond the increase stated above.

Nothing in this letter in any way $\mbox{modifies}$ any of the other $\mbox{provisions}$ of the Research Agreement.

Continued on next page...

Mr. Mark S. Coburn University of California, Santa Cruz November 29, 1995 Page 2

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/J.S. Whang J.S. Whang, President

JSW:rh

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Ву:				
Their	•			
	•			

AMTECH SYSTEMS, INC.

December 4, 1995

Mr. Mark S. Coburn University of California, Santa Cruz Contracts and Grants Office 399C Applied Sciences Building Santa Cruz, California 95064

Re: Payment Procedures

Dear Mr. Coburn:

The purpose of this letter is to confirm our desire that the \$86,215 increase in funding, pursuant to the November 29, 1995 Amendment to the Research Agreement, be billed by the University on a pay as you go basis (i.e. progress billings only for work performed and approved expenses incurred). The billing procedure is subject to change by the mutual agreement between the Sponsor and the University. It is expressly understood that the sum of any such billings will not exceed the agreed upon increase of \$86,215.

If the foregoing accurately reflects your understanding and you agree as set forth above, please have a copy of this letter signed by a duly authorized person and return it to us, whereupon it will become a binding amendment to the Research Agreement.

Very truly yours,

/s/Robert T. Hass Robert T. Hass, CPA Vice President-Finance and Secretary

ACCEPTED AND AGREED TO:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
D
By:

RTH:rh

Their:

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

EXHIBIT 11

SCHEDULE OF COMPUTATION OF NET INCOME PER SHARE

FOR THE YEARS ENDED SEPTEMBER 30, 1995, 1994 AND 1993

	1995	1994	1993
Net income	\$ 226,568	\$ 94,004	\$ 508,670
PRIMARY			
Weighted average number of common shares outstanding during the year	1,901,426	945,351	987 , 538
Add - common equivalent shares determined using the "treasury stock" method representing shares issuable upon vesting of stock bonuses and exercise of employee and director			
stock options	(1)	19,191	3,724
Weighted average number of shares used in the calculation of primary income per common share		964 , 542	•
Primary income per common share	\$.12 ======	\$.10 ======	\$.51
FULLY DILUTED			
Weighted average number of shares used in calculating primary income per common share	1,901,426	964,542	991,262
Add incremental shares representing shares issuable upon exercise of stock options and warrants based upon the year-end market price	(1)	258	21,432
Weighted average number of shares used in the calculation of fully diluted income per common share	1,901,426	964,800	1,012,694
Fully diluted income per common share	\$.12 	\$.10 	

EXHIBIT 11

(1) Determined using the modified treasury stock method.

SUBSIDIARIES OF THE REGISTRANT

Tempress Systems, Inc. -- Incorporated Sunder the laws of the State of Texas.

Echelon Service Company -- Incorporated under the laws of the State of Maryland.

Echelon Security Services Company -- Incorporated under the laws of the State of Maryland (a subsidiary of Echelon Service Company).

<ARTICLE>

5 <LEGEND>

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE BALANCE SHEETS AS OF SEPTEMBER 30, 1995 AND SEPTEMBER 30, 1994, AND THE STATEMENTS OF OPERATION AND THE STATEMENTS OF CASH FLOW FOR THE THREE YEARS ENDED SEPTEMBER 30, 1995 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH ANNUAL REPORT ON FORM 10-K FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1995.

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