

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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(Mark One)

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

For the Fiscal Year Ended: September 30, 1996

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)(I.R.S. Employer
Identification No.)

131 South Clark Drive, Tempe, Arizona

85281

(Address of Principal Executive Offices)

(Zip Code)

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.

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 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).

\$14,128,442 as of December 18, 1996

APPLICABLE ONLY TO REGISTRANTS INVOLVED IN BANKRUPTCY
PROCEEDINGS DURING THE PRECEDING FIVE (5) YEARS:

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.

4,109,668 shares of Common Stock, \$.01 par value, as of December 17, 1996. 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, 1996).

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 28, 1997.

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PART I

ITEM 1. BUSINESS

Background

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 and marketing of several items of capital equipment used by customers in the manufacture of semiconductors, one of which is patented. The Company's Processing/Automation product line (Atmoscan(R), IBAL and load stations) is designed to permit its customers to increase the degree of control over their semiconductor chip manufacturing environment and to reduce exposure to contaminants by limiting human contact during the process. The Company's wholly-owned subsidiary, Tempress Systems, Inc., is engaged in the complementary business of producing and selling horizontal diffusion furnace systems for the semiconductor industry. In addition, the Company 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 "Operating Strategy and Industry Overview" below.

Until recently, the Company also had a 45% ownership interest and 50% voting interest in Seil Semicon, Inc., a South Korean start-up joint venture that plans to develop and operate a silicon test wafer reclaiming business. In December 1996, the Company disposed of its interest in Seil Semicon in order to allow the Company to focus on its core semiconductor equipment business. See "RECENT EVENTS--Sale of Seil Semicon" below.

The Company is dependent for its management and important business relationships on the active participation of its President, Mr. J. S. Whang.

Operating Strategy and Industry Overview

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, or semiconductor "chips," are made of silicon and are part of the circuitry of electronic computers. The manufacture of semiconductors involves many 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 Processing/Automation product line is intended to permit customers using horizontal diffusion furnaces 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. In addition to the Company's Processing/Automation product line, through its wholly-owned subsidiary, Tempress Systems, Inc., the Company manufactures and sells horizontal diffusion furnace systems.

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 Processing/Automation product line is 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. With the addition of Tempress' operations, the Company also can provide its customers

with efficient integrated horizontal diffusion furnace 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 a majority of worldwide semiconductor manufacturing facilities are equipped with horizontal diffusion furnaces, as compared with vertical diffusion furnaces. While the Company estimates that in the next several years 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, although there can be no assurance in that regard. The Company plans to increase its share of the market by expanding its manufacture and sales of horizontal diffusion furnaces. Tempress recently acquired a 9,900 square foot facility in Heerde, The Netherlands, for its European operations. Tempress moved its operations into the new facility in November 1996.

Industry Slowdown. Semiconductor manufacturers currently are experiencing a significant decrease in order bookings. In addition, the prices for semiconductors have declined dramatically, squeezing manufacturers' margins. These factors may affect semiconductor manufacturers' decisions to purchase capital equipment such as the Company's products. Further price declines due to increased supply of semiconductors may have a material adverse effect on the Company's business and results of operations.

Existing Products

Processing/Automation Equipment 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

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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.

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 1996, 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). 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- \$34,000, 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 Trolley 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 Trolley for approximately \$18,000 to \$30,000 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.

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 Trolley for loading into the Atmoscan(R) or on the cantilever paddle system for the appropriate furnace tube. IBAL Butlers have been sold at prices between \$35,000 and \$50,000.

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 prices for the IBAL Queue range from \$18,000 to \$27,000.

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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.

Diffusion Furnaces

Through its wholly-owned subsidiary, Tempress Systems, Inc., the Company produces and sells horizontal diffusion furnace systems, which generally include a Tempress(R) load station, with the Tempress(R) trademark under the Amtech/Tempress name. These furnaces utilize 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 on smaller size silicon wafers. While industry forecasts indicate that overall market demand for horizontal diffusion furnaces will decline, the Company believes that a niche market will persist. Tempress(R) diffusion furnaces equipped with automation and one or more Atmoscans(R) have been sold in the range of \$900,000.

The Company has transitioned from being a distributor of horizontal diffusion furnaces substantially assembled by suppliers to being a manufacturer. The Company continues to acquire substantially all of the parts for furnaces from suppliers. This transition has resulted in an increase in both the number and variety of products offered by the Company and is part of a plan to expand its sales, marketing and manufacturing capabilities. The Company has expended substantial sums to acquire assets and to fund the start-up and operation of the horizontal diffusion furnace business. The Company acquired certain assets previously owned by 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 trade name "Tempress" is also held by three subsidiaries of the former Tempress B.V. in connection with the sale of other 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 the diffusion furnace products designed by former Tempress product engineers and sold under the "Tempress" name are gaining acceptance in the Company's targeted market.

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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 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 horizontal diffusion furnaces will decrease 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 Netherlands operation may incur significant losses.

Proposed New Products

CVD Technology

The Company has patented a certain invention relating to an improvement to the photo-assisted CVD process used in the manufacture of certain semiconductors. Management believes the invention may be of importance to the semiconductor manufacturing industry, and the Company is now having a research study conducted to determine the feasibility of developing semiconductor manufacturing equipment using this invention. A photo-assisted CVD process uses ultraviolet light to activate the deposition reactions rather than thermal heat or plasma energy, which are presently the common means in commercial CVD processing. Photo-assisted CVD processing is currently used for very expensive, low yield semiconductor applications for aerospace and other high cost uses. Management hopes that the Company's invention will make photo-assisted CVD processing practical for general commercial application in the industry. The 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 facilities equipped with horizontal diffusion furnaces 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, photo-assisted CVD processes occur at lower temperatures, which reduces the risk of defects in the deposited materials. In this process, ultraviolet 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 may be 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.

The Company has not determined whether a commercially feasible product can be developed from this technology. The Company has 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. 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 which are patented and a pedestal (called a susceptor) to hold wafers and would be sold to academic and industry research facilities. See

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"Patents." If 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 developing a saleable model of 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.

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., intends to develop and operate a silicon test wafer reclaiming business. The Company had invested \$425,000 in the venture. In September 1996, the Company reached an agreement to dispose of its interest in the joint venture. In accordance with the termination agreement, the Company received \$478,000 as a return of its initial investment and reimbursement of certain direct and indirect expenses related to establishing and monitoring the joint venture. The Company estimated that additional costs during the start-up phase of Seil Semicon, as well as additional equipment required for operations, increased the total projected capital requirements by approximately \$2.5 million over previously anticipated amounts. Under the existing ownership structure, the Company was the joint venture's primary source for these additional funds. Management concluded that increasing the Company's investment in the joint venture by \$2-3 million without obtaining majority control was more risk than was appropriate for the Company.

Manufacturing

The Company designs and 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 in the Company's own machine shop. There are currently no procurement problems being encountered nor are any such problems considered likely. The Company is conducting similar engineering, purchasing and assembly operations in the manufacture of its furnace line in a building owned and located in Heerde, Netherlands. If the proposed photo-assisted CVD product is developed, the Company plans to continue to do the engineering and purchasing and rely on suppliers for most parts and to assemble and do a small amount of machining work internally.

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Order Backlog

As of November 30, 1996, the Company's order backlog for semiconductor equipment was approximately \$3,875,000 compared to approximately \$4,980,000 at the same date in the previous year. The Company includes in its backlog all credit approved customer purchase orders. The Company anticipates that approximately \$2,875,000 of its current backlog will be shipped in fiscal 1997 and the remaining \$1,000,000 will be shipped in fiscal 1998. 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 three 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.

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, two engineers and four technicians. Product development in the past has been accomplished in an important part through cooperative efforts with a key customer and while there can be no assurance, such cooperation is expected to continue to be a significant element in the Company's future development efforts. 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 on the Atmoscan(R) cover the first two U.S. patents listed in the table, below.

The Company has two United States patents on its photo-assisted CVD method, the second being an improvement on the first, and also has a Japanese patent pending on the photo-assisted CVD method.

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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	July 10, 2001
Atmoscan(R)	United States	July 2, 2002
Atmoscan(R)	United States	August 30, 2005
Atmoscan(R)	Korea	May 30, 1999
Atmoscan(R)	Japan	June 1, 2004
Atmoscan(R)	Japan	July 18, 2005
Atmoscan(R)	European Patent Community	
	- France	July 18, 2004
	- Germany	July 18, 2004
	- United Kingdom	July 18, 2004
	- Italy	July 18, 2004
	- Netherlands	July 18, 2004
IBAL Cantilever Trolley	United States	Pending Approval
Photo CVD	United States	June 1, 2010
Photo CVD	United States	November 15, 2011
Photo CVD	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.

Sales and Marketing

There are two components of the market for the Company's existing

products, which consists of semiconductor manufacturers in the United States, Korea, Western Europe, Taiwan, 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 expanding trade of the horizontal diffusion furnace manufactured by the Company in its Netherlands facility and increasing its sales, marketing and manufacturing capabilities in Europe. This plan has and is expected to increase revenue not only through added sales of horizontal furnaces, but by making the other products more competitive by offering them as a part of a broader complement of products with greater capabilities. For example, the Company expects

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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 certain key customers.

During fiscal 1996, four customers accounted for 17%, 10%, 10% and 10%, respectively, of sales from continuing operations. No other customers accounted for 10% or more of sales. For a more complete analysis of significant equipment customers, see Note 6 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 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 may 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. The Company believes that there are

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several products in the market which perform the same functions and which provide a more complete automation solution, but which are more complex and more expensive and require more clean room space than the IBAL automation products, IBAL Trolley, IBAL Butler and IBAL Queue. 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 or as part of a larger equipment package to customers starting-up new facilities, 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 cantilever system is designed for easy assembly and disassembly to minimize down-time during maintenance. The Company's horizontal diffusion furnace systems are involved in intense global competition with the products of

several larger, more recognized manufacturers. The Company expects to sell its horizontal diffusion furnaces to customers and maintain a competitive position by providing competitive prices and product support services designed for the customer's specific requirements. In addition, management believes that because its furnace systems are part of a broad product line, including Atmoscan(R) and IBAL products, they may have a competitive advantage by reducing customers' needs to deal with multiple vendors.

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 48 people (including the corporate officers and 8 contract employees); 18 in manufacturing, 13 in engineering, 9 in administration, and 8 in sales positions. Of these, 26 are employed at the Company's offices and plant in Tempe, Arizona, and 22 at its facility in Heerde, The Netherlands.

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). Foreign sales do not include sales to affiliates.

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<TABLE>

<CAPTION>

	1996		1995		1994	
<S>	<C>	<C>	<C>	<C>	<C>	<C>
United States (1)	\$3,314,007	(39%)	\$2,462,852	(36%)	\$2,472,176	(57%)
Far East (2)	3,014,213	(36%)	3,483,419	(51%)	1,136,432	(26%)
Europe (3)	1,767,803	(21%)	493,786	(7%)	222,376	(5%)
India	317,982	(4%)	424,011	(6%)	500,095	(12%)
Total	\$8,414,005	(100%)	\$6,864,068	(100%)	\$4,331,079	(100%)

</TABLE>

- (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.

For a further description of foreign sales, see Note 6 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. These facilities are leased at a current rate of \$3,515 per month, on a triple net basis, for a term to expire on August 31, 1997.

The Company also owns a 9,900 square foot building located in Heerde, The Netherlands. This facility is expected to provide adequate space for the Company's assembly operations for its furnace line for the foreseeable future.

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. However, at some point it may become more efficient to have all U.S. operations in one facility.

ITEM 3. LEGAL PROCEEDINGS

The Company is not a party to any pending or threatened legal proceedings that it believes will have a material impact on the Company's business.

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 sales price for the shares of the Company's common stock for each quarter of fiscal years 1996 and 1995 as reported by the NASDAQ SmallCap Market.

Quarter Ended -----	High ----	Low ---
Fiscal 1996: -----		
December 31, 1995	\$4.44	\$3.88
March 31, 1996	4.31	3.50
June 30, 1996	5.63	4.13
September 30, 1996	5.13	3.50
Fiscal 1995: -----		
December 31, 1994	2.38	1.69
March 31, 1995	2.19	2.00
June 30, 1995	4.69	2.06
September 30, 1995	4.63	3.63

Holders

As of December 18, 1996, there were 1,463 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, acquisitions 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, 1996 and with respect to the balance sheets at September 30, 1996 and 1995 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. Data from the statements of operations for the fiscal years ended September 30, 1993 and 1992 and the balance sheet data at September 30, 1994, 1993 and 1992 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>

	Fiscal Years Ended September 30,			
	1996	1995	1994	1993
1992				
<S>	<C>	<C>	<C>	<C>
<C>				
Operating Data				
From Continuing Operations:				
Revenues \$2,400,777	\$8,414,005	\$6,864,068	\$4,331,079	\$4,087,886
Operating Profit (1) (744,814)	120,813	39,582	(172,648)	426,890
Income (Loss) from				

Continuing Operations(1) (911,210)	197,591	171,053	(89,469)	302,390
Net Income (Loss) (1) (5) \$(1,501,070)	\$508,683	\$226,568	\$94,004	\$508,670
Primary Earnings Per Share:(1) (2) (3)				
Continuing Operations (loss) \$(.44)	\$.05	\$.04	\$(.05)	\$.15
Net Income(5) \$(.73)	\$.10	\$.06	\$.05	\$.26
Balance Sheet Data				
Cash and Short-term Investments \$ 631,314	\$4,458,337	\$4,505,389	\$1,080,976	\$1,895,042
Working Capital 2,334,623	5,480,452	6,163,304	2,244,628	2,722,362
Total Assets 6,397,033	8,458,614	8,365,519	3,974,922	4,119,928
Total Current Liabilities 3,725,888	1,568,994	1,363,291	852,103	1,091,113
Long-Term Debt -	265,355	-	-	-
Accumulated Deficit (1,750,012)	(412,087)	(920,770)	(1,147,338)	(1,241,342)
Shareholders' Equity(2) (4) 2,671,145	6,624,265	7,002,228	3,122,819	3,028,815

</TABLE>

- (1) The results for the fiscal year 1996 and 1994 include \$132,243 and \$355,405, respectively, of expense for the University study described elsewhere herein.
- (2) 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 and the two-for-one forward split which was effective March 29, 1996.

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- Earnings per share for 1996 and 1995 reflect the sale of 2,415,000 shares in a secondary public offering completed December 22, 1994.
- (3) 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 \$.25.
- (4) The decline in Shareholders' Equity in 1996 resulted from the Company's receipt of 196,034 shares of its Common Stock upon disposition of the stock of Echelon Services Company.
- (5) The results for fiscal 1996 include a \$284,335 gain on the disposal of discontinued operations.

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

The following discussion should be read in conjunction with the financial statements and notes thereto set forth elsewhere herein and the "Forward-Looking Statements" explanation included herein.

LIQUIDITY AND CAPITAL RESOURCES

As of September 30, 1996 and 1995, cash and cash equivalents amounted to \$1,994,000 and \$834,000, respectively. The fiscal 1996 increase in cash and cash equivalents of \$1,160,000, or 139%, resulted from the \$1,207,000 amount by which maturities of short-term investments exceeded purchases of such securities. The total of cash and short-term investments, a broader measure of short-term liquidity, decreased slightly, by \$47,000, to \$4,458,000 as of September 30, 1996, from \$4,505,000 as of the prior year end.

Working capital decreased by \$683,000 to \$5,480,000 from \$6,163,000, a decrease of 11%, primarily as a result of the \$425,000 investment in the Korean joint venture and the investment in land and building for the diffusion furnace operations in The Netherlands. See the Consolidated Statements of Cash Flows included herein. For the same reasons, the ratio of current assets to current liabilities decreased to 4.5:1 from 5.5:1. Cash and short-term investments comprise 52% of total assets and stockholders' equity accounts for 78% of total assets.

Photo-assisted CVD (chemical vapor deposition) Project. 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 has developed designs and specifications for and built a research model of a machine embodying the Company's patented photo-assisted CVD process and proven the feasibility of that process. Amtech entered into amendments of its research and development contract with the University during November 1995 and July 1996, which expand the Company's financial commitment by a total of \$244,000 and extend the contract until the date on which the agreed upon work has been completed, which is expected to occur in the second or third quarter of fiscal 1997. As of September 30, 1996, the balance of this commitment was \$112,000. The purpose of the amendments is to demonstrate the potential rate of deposition using newly developed light sources in various photo-assisted CVD processes and to investigate alternative process chemistries for the deposition of silicon oxide, silicon nitride and other materials. This work will assist the Company in estimating the size of the market before commencing the development of a model of the photo-assisted CVD reactor for research facilities at Amtech's plant.

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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 demonstrates the practical commercial application of the Company's patent, approximately \$3,200,000 of liquidity and capital resources are expected to be expended over a two to three year period, probably beginning in the third quarter of fiscal 1997, in order to develop a commercial model of the photo-assisted CVD reactor at Amtech's facility. 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. See --Acquisitions, below. 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 or for a marketing campaign. Funds for that expansion, if any, are expected to be obtained from one or more sources of financing, such as the possible exercise of the outstanding redeemable common stock warrants, working capital loans from banks, a secondary public offering and internally generated cash flow from operations. There is no assurance of the availability or sufficiency of these or any other source of funding.

In addition to photo-assisted CVD research, the Company expended \$192,000 in fiscal 1996 on research and development for product improvement and development of complementary products. The Board of Directors has authorized the expenditure of up to \$560,000 for such other research and development in fiscal 1997. These other research and development expenses will affect the Company's future operating results.

Acquisitions. During fiscal 1996, 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. in return for a commitment to invest \$500,000 in cash. The purpose of the joint venture was to develop and operate a silicon test wafer reclaiming business. After the end of the fiscal year, the joint venture was dissolved because management determined that increasing the Company's investment commitment to \$3 million, without obtaining majority control, was more risk than was appropriate for the Company. The Company received \$478,000 during December 1996, pursuant to the termination agreement, which compensated the Company for its actual investment and expenses.

Although management discontinued its participation in the Korean Joint Venture, the Company still intends to evaluate potential product or business acquisitions that may complement the Company's business. Based upon current acquisition criteria, such an acquisition could require \$4 million or more of capital resources. The determination of the appropriateness of a potential acquisition would take into consideration many factors including, without limitation, the prospects for the planned photo-assisted CVD product line and the capital that would be required and available for that product line, the economic terms of the acquisition under review, and the potential synergy of the acquired business with the Company's existing business. There can be no assurance that the Company would have the capital resources to accomplish a desired acquisition.

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RESULTS OF OPERATIONS

Fiscal 1996 compared to Fiscal 1995

Continuing Operations.

The revenues of the semiconductor equipment business increased \$1,550,000, or 23%, to \$8,414,000 in fiscal 1996 from \$6,864,000 in fiscal 1995. The increase in revenues is due primarily to the 85% increase in the sales of Tempress horizontal diffusion furnaces and related after market parts resulting from continued growth of the manufacturing operations in The Netherlands. The net sales of the domestic operations' ATMOSCAN(R) and IBAL automation products were essentially unchanged in fiscal 1996 from the level achieved in fiscal 1995. Significant synergies have been achieved with the addition of the Tempress

product line, as both the domestic and foreign operations have secured orders by having a broader line of products to offer, orders that might not otherwise have been obtainable.

The Company is experiencing a slowdown in bookings due to increased caution in capital spending by the world's semiconductor producers, caused by rapidly declining prices for semiconductor chips and an oversupply of capacity for certain of those products, such as memory chips. As a result, industry analysts forecast a significant cyclical decline in the revenue of semiconductor production equipment suppliers in calendar year 1997. One industry survey indicates that the three (3) month moving average of orders booked by suppliers of front-end semiconductor production equipment was nearly 26% lower in the fourth quarter of fiscal 1996 than in the fourth quarter of fiscal 1995. Management believes that it is likely that the Company's domestic sales may decline consistent with the industry trend that develops. While The Netherlands operation may also experience a decline, management believes the significant number of requests for quotations indicates that the equipment buyers now consider Tempress as a viable equipment supplier.

Gross profit was \$2,897,000 for fiscal 1996 versus \$2,305,000 for fiscal 1995, representing a 26% increase. The \$592,000 increase in gross margin primarily results from the expansion of The Netherlands operations. Gross margin as a percentage of revenue was 34.4% in fiscal 1996 versus 33.6% in fiscal 1995, with the improvement being attributed to increased sales from The Netherlands' operations. Further increases in fixed costs are planned for fiscal 1997 as a result of expanding manufacturing capacity. Gross margins as a percentage of revenue are expected to decrease in fiscal 1997, because fixed manufacturing costs are anticipated to be higher and the Company's products facing the greatest price competition are expected to account for a greater percentage of consolidated revenue. Gross margins in absolute terms may be slightly higher, but only if revenues from the Tempress operations continue to increase.

The selling, general and administrative costs were \$352,000 (17%) higher in fiscal 1996 than in fiscal 1995. Costs associated directly with the relatively new operations in The Netherlands grew approximately 29%, thus accounting for 56% of the total increase. Corporate efforts to further penetrate the market with the entire product line on a world-wide basis, the development of new business opportunities and the write-off of certain doubtful accounts receivable accounted for most of the remaining increase in selling, general and administrative

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expenses. However, these costs declined from approximately 30% of revenues during fiscal 1995 to 28% in fiscal 1996.

Relative to many technology businesses, the Company had made relatively small investments in product development prior to fiscal 1994. The Company increased research and product development expenditures in fiscal 1994 by \$257,000 primarily through the expenditure of \$355,000 for photo-assisted CVD research. 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 photo-assisted CVD feasibility study continued through the end of fiscal 1995 without any further financial commitment, total research and development costs in fiscal 1995 were \$180,000 lower than in fiscal 1994. Amtech entered into two amendments of its research and development contract with the University during fiscal 1996, which expanded the Company's financial commitment by a total of \$244,000 and extended the contract until the date on which certain agreed upon work is completed, which is expected to occur in the second or third quarter of fiscal 1997. Approximately \$132,000 of those funds were expended during fiscal 1996, which was the primary cause of the \$93,000 increase in total research and development costs in fiscal 1996 compared to fiscal 1995.

If the results of the photo-assisted CVD feasibility study are sufficiently encouraging, the next phase would be to develop a prototype model for use by research facilities to develop advanced processes for the manufacture of semiconductor devices. Depending on the actual timing and results of the final stage of the feasibility study being conducted by the University, future earnings may decline sharply due to the Company's intention 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. The increased research and development expenses anticipated for this project will affect the Company's future operating results.

In addition to photo-assisted CVD research, the Company expended \$192,000 in fiscal 1996 on research and development for product improvement and development of complementary products. The Board of Directors has authorized the expenditure of up to \$560,000 for such other research and development in fiscal 1997. These other research and development expenses will affect the Company's future operating results.

Operating profits were \$121,000 in fiscal 1996, or 200% more than the \$40,000 reported in fiscal 1995. The improvement in operating profit in fiscal 1996 reflects the expansion of The Netherlands operations, which has reached its break-even point.

Income (loss) from continuing operations before income taxes includes operating income, discussed above, and net interest income, which was \$5,000 higher in fiscal 1996, as compared to fiscal 1995. As a result of these items, the income from continuing operations before income taxes improved by \$87,000, or 33%, to \$348,000 in fiscal 1996.

The income from continuing operations is \$198,000, \$.05 per share, for fiscal 1996, a 16% improvement over the income of \$171,000, or \$.04 per share, in fiscal 1995, after taking into consideration the income tax provision of \$150,000 in fiscal 1996 and \$90,000 in fiscal

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1995. The effective tax rate for fiscal 1996 is higher than the statutory rate and the effective rate of the preceding year because the equity in the losses of the Korean joint venture are not deductible for U.S. income tax purposes. The income tax provision for fiscal 1995 approximates the statutory rate. See Note 4 to the consolidated financial statements for further details including an analysis of the differences between the statutory rate and the effective rate for fiscal 1996 and 1995.

The Company's semiconductor equipment operation has been and will continue to be affected by industry trends. The use and market share of vertical furnaces is increasing throughout the industry on a worldwide basis particularly for the fabrication of leading edge semiconductor devices and is expected to increase in usage to an estimated 50% over the next several years. However, the Company believes that there will continue to be demand for horizontal diffusion furnaces, notwithstanding other advantages of vertical systems (e.g. reduced contamination and the capability to produce more sophisticated semiconductors more efficiently), because for all but mass production runs of small chips on larger wafers there is a higher through-put in horizontal furnaces as compared to vertical furnaces. Also, the Company's products may be used to upgrade, retro-fit or replace existing horizontal furnaces in order to extend their useful lives or otherwise avoid the necessity for the customer to acquire more expensive vertical furnaces. Horizontal furnaces are also sold for use in new facilities that do not require vertical furnaces for the particular process. 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 1994, and other less developed areas, which could further prolong the commercial life of the Company's existing products.

However, the market for the Company's products remains a small niche market. Thus future revenues are and will continue to be dependent upon continued introduction of new products, such as IBAL automation products, or improved versions of products that exist in the market, such as the Tempres(R) horizontal diffusion furnaces and "clean room" load stations. The Company intends to pursue both types of product introductions. Product or business acquisitions may also be a part of the Company's strategy for growth. The Company's long range plans include developing, if feasible, a new product based on its patented photo-assisted CVD technology.

Discontinued Operations

In October 1995, the Board of Directors decided to concentrate on the Company's core semiconductor equipment operations and discontinue the technical contract personnel business. That discontinued operation produced income before income taxes of \$52,000 and \$86,000 for fiscal 1996 and fiscal 1995, respectively. Income taxes for fiscal 1996 and fiscal 1995 were \$25,000 and \$30,000, respectively, resulting in income from discontinued operations of \$27,000 in fiscal 1996 and \$56,000 in fiscal 1995. The decline in income is due to the fact that Amtech System, Inc. owned this operation for one quarter of fiscal 1996, compared to a full year in fiscal 1995. The effective tax rate in fiscal 1996 is higher than the statutory rate because of state income taxes, including the settlement of disputed taxes related to prior years.

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Effective December 29, 1995, the Company exchanged all of its ownership interest in the common stock of Echelon Service Company ("Echelon"), the only remaining operation in the technical contract personnel line of business, for 196,034 shares of the Company's outstanding Common Stock previously owned by Eugene R. Hartman, then an officer and director of the Company. The transaction was preceded by a dividend from Echelon to the Company in order to equalize the values. The transaction was structured to be a tax-free reorganization and, as such, no provision was made for income taxes. As a result of the transaction, the Company recognized a gain of \$284,000.

Total Company

As a result of the gain on the disposal of discontinued operations, net income increased \$282,000 to \$509,000, or \$.10 per share, in fiscal 1996 from \$227,000, or \$.06 per share, in fiscal 1995.

As of November 30, 1996, the Company's order backlog for semiconductor equipment was approximately \$3,875,000 compared to \$4,980,000 as of the same date of the previous year. The decrease in the order backlog is primarily due to the slowdown in bookings due to heightened caution in capital spending by semiconductor producers. 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 largely depend on the timing of the receipt of new orders. Another factor that could significantly affect profitability is the amount of research and development expenses incurred for the development of improvements to existing products, new products and a model of the photo-assisted CVD product designed for use in research facilities.

Fiscal 1995 compared to Fiscal 1994

Continuing Operations.

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 was due primarily to the \$1,811,000 of fiscal 1995 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.

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 manufacturing 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

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to the higher fixed costs in relation to sales associated with the start-up operation in the Netherlands.

The selling, general and administrative costs were \$712,000 (54%) higher in fiscal 1995 as compared to fiscal 1994. The higher costs are almost entirely associated with the new operations in the Netherlands. However, selling, general and administrative costs remained at approximately 30% of revenues during both fiscal 1994 and 1995.

The Company increased research and product development expenditures in fiscal 1994 as compared to fiscal 1993 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.

Operating profits were \$40,000 in fiscal 1995, as compared to an operating loss of \$173,000 in fiscal 1994, an improvement of \$213,000. 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, 105%.

Income From Continuing Operations

Income (loss) from continuing operations before income taxes includes the operating income, discussed above, and net interest income, which increased in fiscal 1995 by \$213,000 and \$166,000, respectively, as compared to fiscal 1994. 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 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.

Discontinued Operations.

Discontinued operations produced income before income taxes of \$86,000 and \$223,000 for fiscal 1995 and fiscal 1994, respectively. Income taxes for

fiscal 1995 and fiscal 1994 were \$30,000 and \$40,000, respectively, resulting in income from discontinued operations of \$56,000

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in fiscal 1995 and \$183,000 in fiscal 1994. The decline in the income from discontinued operations resulted from reductions in requirements of technical contract personnel by the largest customer of those discontinued operations.

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 previous uncertainties.

Total Company

As a result of all of the above factors, net income for fiscal 1995 was \$227,000, or \$.06 per share, including \$.04 per share from continuing operations, as compared to \$94,000, or \$.05 per share, net of a loss of \$.05 per share from continuing operations, in fiscal 1994.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain forward-looking statements. The forward-looking statements contained herein are based on current expectations that involve a number of risks and uncertainties. Among others, these forward-looking statements are based on assumptions that (a) the Company will not lose a significant customer or customers, (b) the Company will not experience significant further reductions in demand or rescheduling of customer purchase orders that have occurred recently due to equipment buyers' caution resulting from declining prices for semiconductor chips, (c) that the Company's products will remain accepted within their respective markets and will not be significantly further replaced by newer technology equipment, (d) that competitive conditions within the Company's markets will not change materially or adversely, (e) that the Company efforts to integrate its Tempress subsidiary in The Netherlands will continue to progress, (f) that the costs of developing the diffusion furnace controller will not materially exceed estimates and that there will be sufficient cost saving and product demand to justify the development costs, (g) that the Company will retain and when needed add to its ranks key technical and management personnel, (h) that business or product acquisitions, if any, will be successfully integrated and the results of operations therefrom will support the acquisition price, (i) that the Company's forecasts will accurately anticipate market demand, (j) that there will be no material adverse changes in the Company's existing operations or business, (k) that the cost and time necessary to complete its photo-assisted CVD feasibility study will not again significantly exceed the Company's projections, and that should the Company proceed to the product development stage, the cost of development will not significantly exceed the Company's projections, (l) the Company will be able to obtain sufficient funding to increase its capital resources by the amount used in business or product acquisitions, if any, and to expand its manufacturing facilities and production capacity in order to produce and ship photo-assisted CVD products, and (m) the post-development start-up losses of a photo-assisted CVD product line, if any, will be manageable, and there will be sufficient demand for the photo-assisted CVD products to recover the related development and start-up costs. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions, and future business decisions, all of which are beyond the control of the Company. Although the Company believes that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate and, therefore, there can be no assurance that the results contemplated in forward-looking statements will be realized. In

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addition, the business and operations of the Company are subject to substantial risks which increase the uncertainty inherent in such forward-looking statements. In light of the significant uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by the Company, or any other person, that the objectives or plans for the Company will be achieved.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Notes to Consolidated Financial Statements
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Financial Statement Schedule for the years ended
September 30, 1996, 1995 and 1994:

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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.

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, 1996 and 1995, and the related consolidated statements of operations, stockholders' investment and cash flows for each of the three years in the period ended September 30, 1996. 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, 1996 and 1995, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 1996, 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 9, 1996.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
September 30, 1996 and 1995

<TABLE>
<CAPTION>

	1996	
1995	-----	----

	ASSETS	

<S>	<C>	<C>
CURRENT ASSETS:		
Cash and equivalents (Note 2)	\$1,994,217	\$
833,820		
Short-term investments (Note 2)	2,464,120	
3,671,569		
Accounts receivable, less allowance for doubtful		
accounts of \$90,000 in 1996 and \$80,000 in 1995	1,581,973	

2,286,743		
Inventories (Note 2)	739,201	
524,071		
Deferred income taxes (Notes 2 and 4)	223,000	
165,000		
Prepaid expenses	46,935	
45,392		
-----		-----
Total current assets	7,049,446	
7,526,595		-----

PROPERTY, PLANT AND EQUIPMENT (Note 2):		
Land, building and leasehold improvements (Note 5)	535,104	
162,404		
Equipment and machinery	432,435	
333,971		
Furniture and fixtures	608,972	
652,607		-----

	1,576,511	
1,148,982		
Less- Accumulated depreciation and amortization	600,180	
499,184		-----

	976,331	
649,798		-----

PURCHASE PRICE IN EXCESS OF NET ASSETS		
ACQUIRED, at amortized cost (Notes 2 and 11)	-	
85,315		-----

OTHER ASSETS (Note 3)	432,837	
103,811		-----

	\$8,458,614	
\$8,365,519		=====
=====		

LIABILITIES AND STOCKHOLDERS' INVESTMENT

CURRENT LIABILITIES:		
Accounts payable	\$ 652,771	\$
528,322		
Accrued liabilities:		
Compensation and related taxes	442,785	
373,383		
Warranty and installation expenses	185,450	
116,347		
Other accrued liabilities	143,988	
120,239		
Income taxes payable (Notes 2 and 4)	144,000	
225,000		-----

Total current liabilities	1,568,994	
1,363,291		-----

LONG-TERM DEBT (Note 5)	265,355	
-		-----

COMMITMENTS AND CONTINGENCIES (Notes 7, 8, and 10)		
STOCKHOLDERS' INVESTMENT (Notes 9 and 11):		
Preferred stock; no specified terms;	-	-
100,000,000 shares authorized; none issued		
Common stock; \$.01 par value; 100,000,000 shares authorized;		
4,109,668 (4,305,702 in 1995) shares issued and outstanding	41,097	
43,057		
Additional paid-in capital	7,043,803	
7,850,482		
Cumulative foreign currency translation adjustment	(48,548)	
29,459		
Accumulated deficit	(412,087)	
(920,770)		

-----		-----	-----
7,002,228	Total stockholders' investment	6,624,265	
-----		-----	-----
\$8,365,519		\$8,458,614	
=====		=====	

</TABLE>

The accompanying notes are an integral part of these Balance Sheets.

F-2
AMTECH SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
For The Years Ended September 30, 1996, 1995 and 1994

<TABLE>
<CAPTION>

	1996	1995	1994
	-----	-----	-----
<S>	<C>	<C>	<C>
Net product sales (Note 6)	\$ 8,414,005	\$ 6,864,068	\$ 4,331,079
Cost of product sales	5,516,936	4,558,675	2,770,039
	-----	-----	-----
Gross margin	2,897,069	2,305,393	1,561,040
Selling and general	2,386,466	2,034,027	1,321,710
Equity in losses of Korean joint venture (Note 3)	65,063	--	--
Photo-CVD project (Notes 2 and 10)	132,243	--	355,405
Other research and development (Note 2)	192,484	231,784	56,573
	-----	-----	-----
Operating profit	120,813	39,582	(172,648)
Interest income-net	226,778	221,471	55,179
	-----	-----	-----
Income (loss) from continuing operations before income taxes	347,591	261,053	(117,469)
Income tax provision (benefit) (Notes 2 and 4)	150,000	90,000	(28,000)
	-----	-----	-----
INCOME (LOSS) FROM CONTINUING OPERATIONS	197,591	171,053	(89,469)
	-----	-----	-----
DISCONTINUED OPERATIONS:			

Income From Discontinued Operations (Note 11)	26,757	55,515	183,473
Gain on Disposal of Echelon (Notes 4 and 11)	284,335	--	--
	-----	-----	-----
	311,092	55,515	183,473
	-----	-----	-----
NET INCOME	\$ 508,683	\$ 226,568	\$ 94,004
	=====	=====	=====

PRIMARY EARNING PER SHARE (Notes 2 and 9):			
Income (Loss) From Continuing Operations	\$.05	\$.04	\$ (.05)
Net Income	\$.10	\$.06	\$.05

FULLY DILUTED EARNING PER SHARE (Notes 2 and 9):			
Income (Loss) From Continuing Operations	\$.05	\$.04	\$ (.05)
Net Income	\$.10	\$.06	\$.05

</TABLE>

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

F-3
AMTECH SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' INVESTMENT
For The Years Ended September 30, 1996, 1995 and 1994

<TABLE>
<CAPTION>

	Common Stock		Additional	Cumulative Foreign Currency

Total				

Stockholders'	Number		Paid-In	Translation	Accumulated
Investment	of Shares	Amount	Capital	Adjustment	Deficit
<S>	<C>	<C>	<C>	<C>	<C>
<C>					
BALANCE AT SEPTEMBER 30, 1993	1,890,702	\$ 18,907	\$4,251,250	\$ -	\$ (1,241,342)
\$3,028,815					
Net income	-	-	-	-	94,004
94,004					
BALANCE AT SEPTEMBER 30, 1994	1,890,702	18,907	4,251,250	-	(1,147,338)
3,122,819					
Net income	-	-	-	-	226,568
226,568					
Secondary Public Offering-Note 9	2,415,000	24,150	3,599,232	-	-
3,623,382					
Translation adjustment	-	-	-	29,459	-
29,459					
BALANCE AT SEPTEMBER 30, 1995	4,305,702	43,057	7,850,482	29,459	(920,770)
7,002,228					
Net income	-	-	-	-	508,683
508,683					
Shares returned upon disposition of Echelon	(196,034)	(1,960)	(806,679)	-	-
(808,639)					
Translation adjustment	-	-	-	(78,007)	-
(78,007)					
BALANCE AT SEPTEMBER 30, 1996	4,109,668	\$ 41,097	\$7,043,803	\$ (48,548)	\$ (412,087)
\$6,624,265					

</TABLE>

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

F-4

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Years Ended September 30, 1996, 1995 and 1994

<TABLE>
<CAPTION>

	1996	1995	1994
<S>	<C>	<C>	<C>
OPERATING ACTIVITIES:			
Net income	\$ 508,683	\$ 226,568	\$ 94,004
Adjustments to reconcile net income to net cash provided (used) by operating activities:			
Depreciation and amortization	179,289	144,085	69,395
Inventory and accounts receivable write-offs	91,085	80,428	34,804
Gain on sale of discontinued operations	(284,335)	--	--
Loss (gain) on sale or retirement of assets	(1,950)	31,398	1,314
Equity in losses of unconsolidated Korean venture	65,063	--	--
Deferred tax benefit	(70,000)	(36,000)	(19,000)
Decreases (increases) in operating assets:			
Accounts receivable	212,067	(762,669)	63,525
Inventories, prepaids and other assets	(284,872)	(73,893)	(388,305)
Increases (decreases) in operating liabilities:			
Accounts payable	160,152	223,091	(101,387)
Accrued liabilities	254,814	123,063	22,377
Income taxes payable	(81,000)	150,000	(160,000)
Net Cash Provided (Used) By Operating Activities	748,996	106,071	(383,273)
INVESTING ACTIVITIES:			
Maturities (purchases) of short-term investments - net	1,207,449	(3,327,577)	549,285
Investment in unconsolidated Korean joint venture	(425,000)	--	--
Proceeds from sale of assets	28,983	19,591	45,342
Purchases of property, plant and equipment	(541,919)	(328,257)	(476,135)

Cash distributed in disposal of Echelon	(109,698)	--	--
Net Cash Provided (Used) By Investing Activities	159,815	(3,636,243)	118,492
FINANCING ACTIVITIES:			
Net proceeds from public offering (Note 9)	--	3,623,382	--
Proceeds from a mortgage loan	291,947	--	--
Principal payments on mortgage loan	(3,650)	--	--
Net Cash Provided By Financing Activities	288,297	3,623,382	--
EFFECT OF EXCHANGE RATE CHANGES			
	(36,711)	3,626	--
CASH AND EQUIVALENTS (Note 2):			
Net increase (decrease)	1,160,397	96,836	(264,781)
Beginning of year	833,820	736,984	1,001,765
END OF YEAR CASH AND EQUIVALENTS	\$ 1,994,217	\$ 833,820	\$ 736,984

</TABLE>

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

F-5
AMTECH SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS - CONTINUED

	1996	1995	1994
	-----	-----	-----
SUPPLEMENTAL CASH FLOW INFORMATION:			
Cash paid during the year for:			
Interest	\$ 5,376	\$ --	\$ --
Income taxes, net of refunds	327,000	6,000	191,000

SUPPLEMENTAL SCHEDULE OF NONCASH
INVESTING AND FINANCING ACTIVITIES:

Value received in the form of the Company's \$.01 par value Common Stock in exchange for the net assets of Echelon Service Company (Note 11)	\$808,639	\$ --	\$ --
--	-----------	-------	-------

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

F-6
AMTECH SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
For The Years Ended September 30, 1996, 1995 and 1994

(1) NATURE OF OPERATIONS:

Amtech Systems, Inc., based in the United States, and Tempres Systems, Inc., a wholly-owned subsidiary created in September 1994, and based in the Netherlands, comprise the "Company". The Company engineers, assembles and sells equipment used in certain thermal processes of manufacturing semiconductors. This equipment is sold to semiconductor manufacturers world-wide, particularly in the United States, Korea, and The Netherlands. See Note 11 regarding discontinued operations.

The Company serves a niche market in 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 trends.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Basis of Presentation - The accompanying consolidated financial statements include the accounts of Amtech Systems, Inc. and its wholly owned subsidiaries, including Echelon Service Company, Note 11, through the date of its disposition. All significant intercompany accounts and transactions have been eliminated in

consolidation.

Revenue Recognition - Revenue is recognized on the accrual basis when the product is shipped and title passes to the customers.

Cash Equivalents and Short-term Investments - Cash equivalents and short-term investments consist of time certificates of deposit and U.S. treasury bills. The Company considers certificates of deposit and treasury bills and the cash flows from them to be cash equivalents if their maturity is 90 days or less from purchase. Investments maturing in over 90 days are considered to be "available-for-sale" (as defined by the Statement of Financial Accounting Standards (SFAS) No. 115) and are recorded at fair value, which approximates cost.

Inventories - Inventories are stated at the lower of cost (first-in, first-out method) or market. The components of inventory as of September 30, 1996 and 1995 are as follows:

	1996	1995
Purchased parts	\$527,321	\$323,215
Work-in-progress	211,880	181,855
Finished goods	--	19,001
	-----	-----
	\$739,201	\$524,071
	=====	=====

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, and leasehold improvements are from three to five years; for furniture and fixtures from five to ten years; and for buildings twenty years.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

Property, Plant and Equipment (continued)

In fiscal 1996, the Company adopted SFAS No. 121, "Accounting for the Impairment of long-Lived Assets and for Long-Lived Assets to be Disposed Of". This standard requires that long-lived assets be reviewed for impairment whenever events or circumstances indicate that the carrying amount of the asset may not be recoverable. If the sum of the expected cash flows from an asset to be held and used in operations is less than the carrying value of the asset, an impairment loss is recognized. Adoption of this Standard did not have a material effect on the Company's financial position or results of operations.

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.

Research and Development Expenses - The Company expenses product development costs as they are incurred. The Company incurred approximately \$325,000 in 1996, \$232,000 in 1995, and \$412,000 in 1994, of expenses related to research of photo-assisted CVD (chemical vapor deposition) equipment and process, the development of diffusion furnaces, and the improvement of Atmoscan (Note 8) and other products.

Foreign Currency Transactions and Translation - Income from continuing operations includes gains from foreign currency transactions of \$56,000 in 1996 and \$11,000 in 1995. There were no material foreign currency transactions prior to 1995. The functional currency of Tempress Systems, Inc. is the Netherlands guilder.

Income Taxes - The Company files consolidated federal income tax returns and computes deferred income tax assets and liabilities based upon cumulative temporary differences between financial reporting and taxable income, carryforwards available and enacted tax law. See Notes 4 and 11.

Income (Loss) Per Common Share - Primary and fully diluted earnings per share in 1996 and 1995 are computed using the modified treasury stock method, because the number of warrants and options exceed 20% of the common shares outstanding at year-end. For fiscal 1994, 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, 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. The weighted average shares outstanding for the purposes of calculating primary earnings per share were 6,341,027, 3,802,853 and 1,929,084 for 1996, 1995 and 1994, respectively. The average outstanding shares for the calculation of fully diluted earnings per share were not materially different. The weighted average shares outstanding for 1996 includes 2,165,299 shares currently issuable upon exercise of the warrants and stock options because they are dilutive.

Accounting for Stock-Based Compensation - This new accounting pronouncement, SFAS No. 123, must be adopted by the Company in fiscal 1997. As permitted by SFAS No. 123, the Company will continue to account for transactions with its directors and employees pursuant to Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees". Companies which choose this alternative method are required to disclose the pro forma effects on earnings and earnings per share as if the effects of stock based compensation had been accounted for in the financial statements. Management has not yet calculated the effects of those pro forma adjustments.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

Use of Estimates - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates.

Fair Value of Financial Instruments - The carrying values of the Company's current assets and current liabilities approximate fair value due to the short term in which these instruments mature. The carrying value of the Company's long-term debt approximates fair value because the interest rate of the mortgage note payable (Note 5) approximates prevailing interest rates for similar debt instruments.

Reclassifications - Certain reclassifications have been made to the 1994 and 1995 amounts to conform to the 1996 presentation.

(3) KOREAN JOINT VENTURE:

In the first quarter of fiscal 1996, the Company entered into a joint venture agreement pursuant to which the Company received a 45% ownership interest and a 50% voting interest in Seil Semicon, Inc. (the "JVC") in return for a commitment to invest \$500,000 in cash. The joint venturers planned to operate a silicon test wafer reclaiming business in Korea through Seil Semicon, Inc., which remains in the start-up phase. Pursuant to that agreement, the Company invested \$425,000 and expensed \$65,000 of that amount as its share of the start-up losses. The joint venture succeeded in acquiring real property for construction of the reclamation facility and in securing \$3 million in third party financing. However, a review during the fourth quarter of fiscal 1996 revealed that the increases in the JVC's anticipated costs during the start-up phase and the cost of additional equipment required for the operation had expanded the total projected capital requirements by \$2,500,000. After the end of the fiscal year, the Company's financial relationship with the joint venture was terminated because management determined that raising the Company's investment commitment to \$3 million, without obtaining majority control, was more risk than was appropriate for the Company. The Company received \$478,000 during December 1996, pursuant to the termination agreement, which reimbursed the Company's actual investment and expenses. As of September 30, 1996, the \$360,000 carrying value of the investment in the JVC was included in other assets.

(4) INCOME TAXES:

The provision for (benefit from) income taxes on continuing operations consists of:

	1996	1995	1994
	-----	-----	-----
Current-			
Federal	\$ 212,000	\$ 130,000	\$ (13,000)
State	8,000	2,000	--
	-----	-----	-----
	220,000	132,000	(13,000)
	-----	-----	-----
Deferred-			
Federal	(70,000)	(42,000)	(15,000)
State	--	--	--
	-----	-----	-----

(70,000)	(42,000)	(15,000)
-----	-----	-----
\$ 150,000	\$ 90,000	\$ (28,000)
=====	=====	=====

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(4) INCOME TAXES - (continued)

The provision for income taxes on continuing operations 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:

	1996	1995	1994
	-----	-----	-----
<S>	<C>	<C>	<C>
Tax provision at the statutory rate	\$ 118,000	\$ 89,000	\$ (40,000)
Effect of amortization of goodwill and other expenses not deductible for tax reporting purposes	3,000	13,000	10,000
State tax provision	28,000	54,000	(4,000)
Research & development credit	--	--	(27,000)
Change in valuation allowance	(20,000)	(52,000)	4,000
Other items	21,000	(14,000)	29,000
	-----	-----	-----
Actual tax provision	\$ 150,000	\$ 90,000	\$ (28,000)
	=====	=====	=====

</TABLE>

The components of deferred taxes as of September 30, 1996 and 1995 are as follows:

	1996	1995
	-----	-----
Allowance for doubtful accounts	\$ 38,000	\$ 32,000
Uniform capitalization of inventory costs	43,000	34,000
Inventory write-downs not currently deductible	45,000	38,000
Book vs. tax depreciation	(24,000)	--
State net operating loss carryforwards	2,000	42,000
Liabilities not currently deductible	177,000	97,000
Valuation allowance	(58,000)	(78,000)
	-----	-----
	\$ 223,000	\$ 165,000
	=====	=====

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.

See Note 11 regarding the income tax treatment of the gain on the disposal of discontinued operations.

(5) LONG-TERM DEBT

Long-term debt consists of a twenty (20) year mortgage secured by the Company's land and building located in The Netherlands and a construction deposit for remodeling the building. The collateral has a carrying value of \$403,000. Principal is payable in The Netherlands guilder in 240 equal monthly payments. Principal payments are \$14,000 for each of the next five years, with the payments for 1997 being included with accounts payable as of September 30, 1996. Interest for the first five years is fixed at 6.95%, after which the rate will be adjusted to the prevailing market rate. During the five year fixed interest period there is a penalty for prepayment of the loan.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(6) MAJOR CUSTOMERS AND FOREIGN SALES:

The Company had major customers which account for more than 10% of sales as follows:

1996	1995	1994
17%	28%	18%
10%	11%	14%
10%	-	11%
10%	-	-
47%	39%	43%

The individual line items above do not reflect the same customers in each year. As of September 30, 1996, receivables from three customers comprise 50% of accounts receivable, representing a concentration of credit risk as defined by SFAS No. 105.

The Company's sales were to the following geographic regions:

	1996	1995	1994
United States (including 1% or less to Canada)	39%	36%	57%
Far East (Korea, People's Republic of China, Taiwan, Japan, and Singapore)	36%	51%	26%
Europe (including Israel)	21%	7%	5%
India	4%	6%	12%
	100%	100%	100%

(7) 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, 1996:

1997	\$ 69,000
1998	23,000
1999	10,000
	\$102,000

Rental expense related to continuing operations, net of sublease income, for 1996, 1995 and 1994 was approximately \$108,000, \$76,000 and \$50,000, respectively.

(8) 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 until November 22, 2000. From the first quarter of fiscal 1994 through the year 2000, royalties on sales of complete units of the product are 4% and 2% on any spare parts. Royalty expense included in cost of product sales of the semiconductor equipment segment totaled approximately \$47,000, \$49,000 and \$63,000 in 1996, 1995 and 1994, respectively.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(9) STOCKHOLDERS' INVESTMENT AND STOCK OPTIONS:

Effective with the close of business on March 29, 1996, each share of the \$.01 par value common stock of the Company was split into two shares. All shares and per share amounts have been restated to give effect for this two for one forward stock split.

On December 22, 1994, the Company completed a secondary public offering of 2,415,000 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 six (6) 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.

Each redeemable warrant issued in the offering entitles the holder to acquire two shares of the Company's \$.01 par value common stock at an exercise price of \$2.75 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 underwriter's warrant and the redeemable warrants are 210,000 at a per share price of \$2.25 and 2,625,000 at a per share price of \$2.75, respectively.

The Board has reserved 93,000 shares of common stock for use by the 1983 Incentive Stock Option Plan, which is now expired, 40,000 shares under Director Stock Purchase Agreements, 200,000 shares for the Non-Employee Directors Stock Option Plan and 320,000 shares to be used jointly by the Amended and Restated 1995 Stock Option Plan and the 1995 Stock Bonus Plan, for a total 653,000 shares so reserved. Incentive stock options issued under the terms of the plans have or will have an exercise price equal to or greater 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, nonqualified options may also be issued. As of September 30, 1996, no options have been granted under the 1995 Stock Option Plan.

The following is a summary of outstanding stock options, 81,000 of which are exercisable, as of September 30, 1996:

<TABLE>
<CAPTION>

Nature of Options	Number of Shares	Exercise Price	Expiration Date
-----	-----	-----	-----
<S>	<C>	<C>	<C>
Directors' options	40,000	\$1.06-\$2.23	90 days after termination
Incentive Stock Option Plan-			
President	15,000	1.76	1996-1998
Other employees	78,000	.63-1.13	1997-2003

	133,000		
	=====		

</TABLE>

The Board of Directors adopted the 1995 Stock Bonus Plan under which grants to employees for 46,500 shares remain outstanding as of September 30, 1996. Under the terms of those grants, the employees have or will in fiscal 1996, 1997, 1998 and 1999, vest in regards to 15,100, 14,600, 14,800 and 2,000 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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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

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. Although such shares are not reflected in the Consolidated Statements of Stockholders' Investment, because the shares have not been issued, pending vesting and registration, they are included in the calculation of earnings per share.

(10) 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 Company's technology and used it to conduct the initial study. In fiscal 1996, the company amended its contract to extend its term to the later of October 31, 1996 or the date on which the work is completed, and to increase its financial commitment. As of September 30, 1996, the remaining commitment on the contract was \$112,000. The purpose of the contract amendment is to determine whether 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 and it is reasonably possible that these estimates will be revised based upon an analysis of the final study results. Funds for that expansion, if any, are expected to be obtained from one or more sources of financing, such as the possible exercise of the outstanding redeemable common stock warrants, working capital loans from banks, a secondary public offering and internally generated cash from operations. There is no assurance of the availability or sufficiency of these or any other source of financing.

The Company has internal commitments to expend up to \$560,000 on developing new products that are complementary to the horizontal diffusion product line and improving existing products.

(11) DISCONTINUED TECHNICAL CONTRACT PERSONNEL SEGMENT:

The Company entered the technical contract personnel segment in 1988. On September 30, 1992, the Company sold substantially all of the operations of the technical contract personnel segment, with only Echelon Service Company ("Echelon") being retained. Echelon was acquired in 1989, using stock and cash

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(11) DISCONTINUED TECHNICAL CONTRACT PERSONNEL SEGMENT - (continued)

at closing as consideration, as well as an incentive arrangement payable in cash and stock. Since October 1995, when the board of directors approved a plan to discontinue the technical contract personnel business, those operations have been designated as discontinued in financial reports of the Company.

Effective December 29, 1995, the Company exchanged all of its ownership interest in the stock of Echelon for 196,034 shares of the Company's outstanding \$.01 par value Common Stock previously owned by Eugene R. Hartman, then an officer and director of the Company. The transaction was preceded by a dividend from Echelon to the Company in order to equalize values. The transaction was structured to be a tax-free reorganization and, as such, no provision for income taxes has been made relative to this transaction.

The results of the discontinued operations reflected in the consolidated statements of operations are those of Echelon through the date of the disposal. Revenue of the discontinued operations were \$1,235,000 for the three months ended with the December 1995 disposition and \$4,549,000 and \$6,224,000, respectively, for the two years in the period ended September 30, 1995. Income from discontinued operations for fiscal 1996, 1995, and 1994 are net of applicable income taxes of \$25,000, \$30,000 and \$40,000, respectively. Goodwill net of accumulated amortization as of September 30, 1995, related to the acquisition of Echelon, amounted to \$85,315 as of that date, and was one of the assets disposed of in the December 1995 transaction.

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

FOR THE YEARS ENDED SEPTEMBER 30, 1996, 1995 AND 1994

<TABLE>					
<CAPTION>					
	For the Year Ended	Balance at Beginning	Additions Charged (Credited)	Write-offs	End of
Balance at Year	September 30,	of Year	to Expense		
	Year				
	-----	-----	-----	-----	-----
<S>	<C>	<C>	<C>	<C>	<C>
1. Allowance for Doubtful Accounts					
	1996	\$ 80,000	\$ 66,249	\$56,249	\$
90,000					

80,000	1995	45,000	35,704	704
45,000	1994	45,000	73,720	73,720

2. Deferred Tax Asset Valuation Allowance

58,000	1996	\$ 78,000	\$ (20,000)	\$ -	\$
78,000	1995	150,000	(72,000)	-	
150,000	1994	150,000	-	-	

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ITEM 9. DISAGREEMENTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not Applicable.

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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 28, 1997.

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 28, 1997.

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 28, 1997.

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 28, 1997.

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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, 1996 and 1995
2. Consolidated Statements of Operations for the years ended September 30, 1996, 1995 and 1994
3. Consolidated Statements of Stockholders' Investment for the years ended September 30, 1996, 1995 and 1994
4. Consolidated Statements of Cash Flows for the years ended September 30, 1996, 1995 and 1994

5. Notes to Consolidated Financial Statements - September 30, 1996, 1995 and 1994

(b) Financial Statement Schedules

The following is a list of a financial statement schedule required to be filed as a part of this Report:

1. Schedule II - Valuation and Qualifying Accounts

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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(c) Exhibits.

<TABLE>

<CAPTION>

Exhibit No. -----	Description -----	Method of Filing -----
<S>	<C>	<C>
3.1	Articles of Incorporation	A
3.2	Articles of Amendment to Articles of Incorporation, dated April 27, 1983	A
3.3	Articles of Amendment to Articles of Incorporation, dated May 19, 1987	B
3.4	Articles of Amendment to Articles of Incorporation, dated May 2, 1988	C
3.5	Articles of Amendment to Articles of Incorporation, dated May 28, 1993	G
3.6	Amended and Restated Bylaws	D
10.1	Amended and Restated 1995 Stock Option Plan	J
10.2	1995 Stock Bonus Plan	J
10.3	Non-Employee Director Stock Option Plan	K
10.4	J.S. Whang Stock Option Agreement	A
10.5	Employment Agreement with Robert T. Hass, dated May 19, 1992	F
10.6	Registration Rights Agreement with J.S. Whang, dated January 24, 1994	G
10.7	Employment Agreement with J.S. Whang, dated October 1, 1994	G
10.8	Contract of Sale (Real Property) dated June 21, 1996 between Tempress Systems, Inc. and Orgelmakerij Gedr. Rell B.V.	I
10.9	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	H
10.10	Amendment to Research Agreement with the Regents of the University of California dated July 8, 1996	I
10.11	Joint Venture Termination and Stock Redemption Agreement dated September 24, 1996	*

</TABLE>

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<TABLE>

<CAPTION>

Exhibit No. -----	Description -----	Method of Filing -----
<S>	<C>	<C>
11	Schedule of Computation of Net Income per Share	*
22	Subsidiaries of the Registrant	*
23	Consent of Arthur Andersen LLP	*
24	Powers of Attorney	See Signature Page

</TABLE>

- - - - -

* Filed herewith.

A Incorporated by reference to the Company's Form S-18 Registration Statement No. 2-83934-LA

B Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1987

C Incorporated by reference to the Company's Annual Report on Form 10-K 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

E Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1992

F Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1993

G Incorporated by reference to the Company's Form S-1 Registration Statement No. 33-77368

H Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1995

I Incorporated by reference to the Company's Form S-3 Registration Statement No. 333-09917

J Incorporated by reference to Company's Form S-8 Registration Statement relating to the Amended and Restated 1995 Stock Option Plan and the 1995 Stock Bonus Plan filed with the Securities and Exchange Commission on August 8, 1996

K Incorporated by reference to Company's Form S-8 Registration Statement relating to the Non-Employee Directors Stock Option Plan filed with the Securities and Exchange Commission on August 8, 1996

(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 1996.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMTECH SYSTEMS, INC.

December 30, 1997

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:

<TABLE>

<CAPTION>

Signature

Title

Date

- - - - -

<S>

/s/ Jong S. Whang

<C>

Chairman of the Board,

<C>

December 30, 1997

Jong S. Whang

President (Chief Executive Officer)

/s/ Robert T. Hass

Vice President-Finance

December 30, 1997

Robert T. Hass

(Chief Financial & Accounting Officer)

/s/ Donald F. Johnston Director

Donald F. Johnston

December 30, 1997

/s/ Alvin Katz Director

Alvin Katz

December 30, 1997

/s/ Bruce R. Thaw Director

Bruce R. Thaw
</TABLE>

December 30, 1997

JOINT VENTURE TERMINATION &
STOCK REDEMPTION AGREEMENT

BETWEEN

AMTECH SYSTEMS, INC

AND

INDIVIDUAL INVESTORS

AND

SEIL SEMICON, INC.

DATED: September , 1996
JOINT VENTURE TERMINATION &
STOCK REDEMPTION AGREEMENT

BETWEEN

AMTECH SYSTEMS, INC

AND

INDIVIDUAL INVESTORS

AND

SEIL SEMICON, INC.

The parties to this Agreement are Amtech Systems, Inc. ("Amtech"), a corporation duly organized and existing under the laws of the State of Arizona, United States of America ("USA") having its principal place of business at 131 South Clark Drive, Tempe, Arizona, USA, the INDIVIDUAL INVESTORS, whose signatures are subscribed hereto, being hereinafter collectively referred to as the KOREAN INVESTMENT GROUP ("KIG"), and Seil Semicon, Inc., a Korean joint stock company (chusik hoesa) ("Seil").

The parties have agreed as follows:

1. RECITALS

1.1 Stock Ownership. Amtech is the owner of 45% of the issued and outstanding capital stock of Seil and has the proxy of A.G. Lee to vote an additional 5% of the outstanding capital stock of Seil. Furthermore, Amtech is a joint venture partner in Seil, with the second largest interest in the venture, through the Joint Venture Agreement dated September 30, 1995, as revised per the Amendment Agreement dated November 23, 1995, and through which certain benefits and obligations were to accrue to Amtech (the "JVC AGREEMENT").

1.2 Purpose. The KIG has requested the termination of the JVC Agreement and has sought mutual agreement for termination pursuant to Article 17.1 of that agreement. Amtech has agreed to said termination on the condition that mutual agreement is reached for the disposition of its interest in Seil pursuant to Article 18.2 of the JVC Agreement. Seil desires to redeem the 45% ownership interest of Seil owned by Amtech through the purchase from it of all of the outstanding capital stock of Seil owned by Amtech ("Seil Stock"), in accordance with the mutual agreement reached between the KIG, Amtech, and Seil. Amtech desires to sell the Seil Stock to Seil pursuant to the terms and conditions of this Agreement.

2. THE TRANSACTION

2.1 Redemption of Seil Stock. Subject to all of the terms and conditions of this Agreement, Amtech agrees to sell and Seil

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agrees to redeem, at the Closing (hereinbelow defined), but effective as of September 30, 1996, unless closed earlier, the Seil Stock, free and clear of all liens, claims, options, charges and encumbrances whatsoever, for the redemption price specified below.

2.2 Redemption Price. The redemption price for the Seil Stock shall be \$478,143 and shall be paid on or before September 30, 1996.

2.3 Termination of JVC. When one or more Certificates of Termination in

the same form as Exhibit A, attached, have been signed by Amtech, Seil, and the KIG, Mr. Seung Kag Hong, Jae-Im KO, his wife, and A.G. Lee (the "Parties"), the JVC will terminate and the Parties will no longer have any further rights or obligations under the JVC Agreement, except as may be provided in the Certificates of Termination.

2.4 Closing. The delivery of the Seil Stock, the delivery of the Certificates of Termination, and the payment of the redemption price in the amount of \$478,143 and of any other instruments, certificates and items to be delivered under this Agreement (the "Closing") shall take place by facsimile assignment of the Seil Stock, facsimile delivery of the Certificates of Termination and the wire transfer, with facsimile confirmation, of funds via the SWIFT system to:

Mellon Bank
Pittsburgh, Pennsylvania, USA
ABA # 0430-0026-1
Credit: Merrill Lynch
For further credit to:
Amtech Systems, Inc.

on or before September 30, 1996, Arizona time (the "closing Date") or at such other place or time upon which the parties may agree in writing. The Parties hereby agree that signed assignments, certificates and other instruments delivered by means of facsimile transmission will be legally binding and treated the same as if an original. Facsimile transmissions to Amtech should be sent to 1-602-968-3763 and if to any of the other Parties to 82-2-581-4773. The Parties agree to mail a signed original of each document delivered by facsimile, if requested by one of the other Parties.

3. REPRESENTATIONS AND WARRANTIES OF AMTECH

3.1. Representations and Warranties. Amtech represents and warrants to and agrees with Seil that:

(a) Authority. Amtech has all requisite corporate power and authority to execute, deliver and perform this Agreement

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and has taken all necessary corporate action to authorize the execution, delivery and performance of this Agreement and to consummate the transactions contemplated by this Agreement. This Agreement has been duly executed and delivered by Amtech, and each document or instrument executed or to be executed by Amtech pursuant hereto upon execution and delivery will have been duly executed and delivered, and this Agreement constitutes the legal, valid and binding obligation of Amtech, enforceable in accordance with its terms.

(b) No Conflict. The execution and delivery of this Agreement, the consummation of the transactions contemplated hereby, and the compliance with the terms and conditions hereof will not, to the knowledge of Amtech, conflict with, or result in a breach of (1) any relevant statute, law, ordinance, rule or regulation applicable to Amtech or its business, or (2) the terms, conditions or provisions of the corporate charter or the by-laws of Amtech, the conflict or breach of which would adversely affect Seil's rights hereunder in any material respect.

(c) Disclosure. To the knowledge of Amtech, no representation or warranty by Amtech hereunder contains or will contain any untrue statement of a material fact, or omits or will omit to state a material fact necessary to make the statements contained therein not misleading.

3.2. Representations and Warranties True on the Closing Date. To the knowledge of Amtech, all of the representations and warranties of Amtech contained herein shall be true and correct in all material respects on and as of the Closing Date, except as consented to by Seil in writing on or before the Closing Date.

3.3. Survival of Representations and Warranties. The representations and warranties of Amtech contained herein shall survive the Closing Date.

4. REPRESENTATIONS AND WARRANTIES OF SEIL AND KIG

4.1. Representations and Warranties. Seil and the undersigned Individual Investors represent and warrant to and agree with Amtech that:

(a) Corporate Existence. Seil is a corporation duly organized and existing under the laws of Korea and has the corporate power and authority to enter into this Agreement.

(b) Validity of Agreement. Seil has taken such corporate steps as are necessary to authorize the execution of the Agreement and to comply in full with the terms thereof

that are to be performed by Seil. This Agreement is a valid obligation of Seil in accordance with its terms. This Agreement and compliance with its terms are not inconsistent with Seil's Articles of Organization, its by-laws or any agreement to which Seil is a party.

This Agreement when signed by the Individual Investors will binding upon them.

(c) Governmental Interference. Seil and the Individual Investors do not know or have reasonable grounds to know of any action before a court or other governmental body pending or threatened by the government or any agency thereof or by any other third party that might restrain or prohibit the redemption by Seil of the Seil Stock as herein contemplated or the termination of the JVC Agreement.

(d) Consents and Approvals. Seil and the Individual Investors do not know or have reasonable grounds to know of any requirement for the consents or approvals of third parties, whether they be the Industrial Bank of Korea, its affiliates, parties to other agreements, or the government of Korea or its provinces or any agency thereof, in order to enter into the Agreement and to comply in full with the terms thereof that are to be performed by them, or that if any such consents or approvals are so required, they will be obtained by the Closing.

4.2. Representations and Warranties True on Closing Date. All of the representations and warranties of Seil and the Individual Investors contained herein shall be true and correct in all respects on and as of the Closing Date, except as consented to by Amtech on or before the Closing.

5. CONDITIONS TO CLOSING

5.1. Conditions to Closing by the Parties. The obligations of Amtech, KIG and Seil to consummate the transactions contemplated hereby are, at the option of each party, subject to the fulfillment of the condition that on the Closing Date:

(a) there shall not be any injunction, writ, preliminary restraining order or any order of any nature issued by any court or governmental agency directing the transaction contemplated by this Agreement not be consummated, and

(b) there shall not be pending or known to be threatened any action, proceeding or investigation before any such court or governmental agency seeking as to any party hereto any such injunction, writ, or preliminary restraining order.

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5.2. Conditions to Closing by Seil and the KIG. The obligations of Seil and the KIG to consummate the transactions contemplated hereby are, at the option of Seung Kag Hong, subject to the fulfillment of each of the conditions that, on or before the Closing Date:

(a) Representations and Warranties True; Obligations Performed.

(i) The representations and warranties of Amtech contained in Section 3.1 hereof shall be true and correct in all material respects at and as of the Closing Date except for specifically consented to or approved by Seil in writing, with the same force and effect as if made at and as of the Closing Date;

(ii) Amtech shall have delivered to Seil an assignment of the Seil Stock or other documents reflecting the legal transfer of ownership as may reasonably be requested by Seil, dated the Closing Date and signed by the President of Amtech.

(c) Certain Legal Matters. All actions, proceedings, instruments and documents required to carry out this Agreement, or incidental thereto, and all other related legal matters, shall be reasonable satisfactory to the President of or counsel for Seil and such person shall have received all documents, instruments or copies thereof, certified if and as may be reasonably requested.

(d) Compliance. Amtech shall have performed and complied in all material respects with all agreements, covenants and conditions required by this Agreement to have been performed or complied with prior to or at the Closing Date.

(e) Other Instruments and Actions. Amtech shall have executed and delivered to Seil such other instruments and taken such other

action as Seil may reasonably have requested with respect to the transactions contemplated by this Agreement.

5.3 Conditions to Closing by Amtech. The obligations of Amtech to consummate the transactions contemplated hereby are, at the option of Amtech, subject to the fulfillment of each of the conditions that, on or before the Closing Date:

(a) Representations and Warranties True; Obligations Performed. (i) The representations and warranties of Seil and the Individual Investors contained in Section 4.1 hereof shall be true and correct at and as of the Closing Date except

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for specifically consented to or approved by Amtech in writing, with the same force and effect as if made at and as of the Closing Date.

(b) Compliance. Seil and the KIG shall have performed and complied with all agreements, covenants and conditions required by this Agreement to have been performed or complied with prior to or at the Closing Date.

6. BROKERS

Amtech and Seil represent that they have dealt with no broker in connection with any of the transactions contemplated by this Agreement and that no broker or other person is entitled to any commission or finder's fee in connection with any of such transactions.

7. INDEMNIFICATION BY AMTECH

Amtech hereby agrees to indemnify and hold harmless Seil and KIG (herein referred to as "Seil/KIG"), at all times after the date of this Agreement, against and in respect of:

(a) Any and all damage or deficiency resulting from any material inaccuracy of any representation or warranty made by or non-fulfillment of any agreement on the part of Amtech under this Agreement, whether or not such inaccuracy, breach, nonfulfillment, misrepresentation or omission was or should have been known by Seil/KIG on the date of this Agreement, it being the agreed intention of the parties that Amtech shall be completely responsible for, and Seil/KIG shall be conclusively deemed to have relied upon, such representations, warranties, agreements and instruments.

(b) Any and all actions, suits, proceedings, demands, assessments, judgments, costs and expenses, including without limitation, reasonable attorneys' fees, incident to any of the foregoing; provided that no claim for indemnification shall be made pursuant to this Section 7 unless Seil/KIG has suffered such loss, damage or expense in a cumulative minimum of \$5,000.

(c) Promptly after receipt by Seil/KIG under this Section 7 of notice of the commencement of any action, Seil/KIG will, if a claim in respect thereof is to be made against Amtech under this Section 7, notify Amtech in writing of the commencement thereof, but the omission to notify Amtech will not relieve Amtech from any liability that it may have to Seil/KIG otherwise than under this Section 7. In case any such action is brought against Seil/KIG and it notifies Amtech of the commencement thereof, Amtech will be entitled to

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participate therein and, to the extent that it may elect by written notice delivered to Seil/KIG promptly after receiving the aforesaid notice from Seil/KIG, to assume the defense thereof; provided, however, if the defendants in any such action include both Seil/KIG and Amtech and either (i) Amtech mutually agrees, or (ii) representation of both Seil/KIG and Amtech by the same counsel is inappropriate under the applicable standards of professional conduct due to actual or potential conflicting interests between them, Seil/KIG shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action. Amtech will not be liable to Seil/KIG under this Section 7 for any legal or other expenses subsequently incurred by Seil/KIG in connection with the defense thereof unless (i) Seil/KIG shall have employed counsel in connection with the assumption of legal defenses in accordance with the proviso to the next preceding sentence (it being understood, however, that Amtech shall not be liable for the expense of more than one separate counsel approved by Amtech), (ii) Amtech shall not have employed counsel to represent Seil/KIG within a reasonable time after notice of commencement of the action, or (iii) Amtech has authorized the employment of counsel for Seil/KIG at the expense of Amtech. In no event shall Amtech be liable under this Section 7 for any settlement effected without its written consent, of any claim or action against Seil/KIG.

8. INDEMNIFICATION BY SEIL AND KIG

Seil and the KIG (herein referred to as "Seil/KIG") hereby agree to indemnify and hold harmless Amtech and to accept joint and several liability therefor, at all times after the date of this Agreement, against and in respect of:

(a) Any and all damage or deficiency resulting from any material inaccuracy of any representation or warranty made by or non-fulfillment of any agreement on the part of Seil/KIG under this Agreement, whether or not such inaccuracy, breach, nonfulfillment, misrepresentation or omission was or should have been known by Amtech on the date of this Agreement, it being the agreed intention of the parties that Seil/KIG shall be completely responsible for, and Amtech shall be conclusively deemed to have relied upon, such representations, warranties, agreements and instruments.

(c) Any and all actions, suits, proceedings, demands, assessments, judgments, costs and expenses, including without limitation, reasonable attorneys' fees, incident to any of the foregoing; provided that no claim for indemnification shall be made pursuant to this Section 8 unless Amtech has suffered such loss, damage or expense in a cumulative minimum of \$5,000.

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(d) Promptly after receipt by Amtech under this Section 8 of notice of the commencement of any action, Amtech will, if a claim in respect thereof is to be made against Seil/KIG under this Section 8, notify Seil/KIG in writing of the commencement thereof, but the omission to notify Seil/KIG will not relieve Seil/KIG from any liability that it may have to Amtech otherwise than under this Section 8. In case any such action is brought against Amtech and it notifies Seil/KIG of the commencement thereof, Seil/KIG will be entitled to participate therein and, to the extent that it may elect by written notice delivered to Amtech promptly after receiving the aforesaid notice from Amtech, to assume the defense thereof; provided, however, if the defendants in any such action include both Amtech and Seil/KIG and either (i) Seil/KIG mutually agrees, or (ii) representation of both Seil/KIG and Amtech by the same counsel is inappropriate under the applicable standards of professional conduct due to actual or potential conflicting interests between them, Amtech shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action. Seil/KIG will not be liable to Amtech under this Section 8 for any legal or other expenses subsequently incurred by Amtech in connection with the defense thereof unless (i) Amtech shall have employed counsel in connection with the assumption of legal defenses in accordance with the proviso to the next preceding sentence (it being understood, however, that Seil/KIG shall not be liable for the expense of more than one separate counsel approved by Seil/KIG), (ii) Seil/KIG shall not have employed counsel to represent Amtech within a reasonable time after notice of commencement of the action, or (iii) Seil/KIG has authorized the employment of counsel for Amtech at the expense of Seil/KIG. In no event shall Seil/KIG be liable under this Section 8 for any settlement effected without its written consent, of any claim or action against Amtech.

9. NOTICE

Any and all notices herein provided for or relating to the transactions contemplated by this Agreement shall be in writing and shall be deemed to have been sufficiently given to Amtech if mailed, postage prepaid, by certified mail with return receipt requested and addressed to, or if delivered, to:

AMTECH SYSTEMS, INC.
131 SOUTH CLARK
TEMPE, ARIZONA 85281
ATTN: J.S. WHANG, PRESIDENT

and to Seil if mailed, postage prepaid, by certified mail with return receipt requested and addressed to, or delivered, to:

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SEIL SEMICON, INC.
SEOUL, SOUTH KOREA
ATTN: SEUNG KAG HONG, PRESIDENT

and to KIG if mailed, postage prepaid, by certified mail with return receipt requested and addressed to, or delivered, to:

MR. SEUNG KAG HONG AND
JAE-IM-KO
211-1402 LG APT.
JUNG-JA DONG, SUNG-NAM
KYUNG-KI DO, KOREA

or to such other address as either party may specify in writing by notice to the other.

10. EXPENSES

Amtech and Seil shall each pay their own costs and expenses incurred in connection with the preparation of this Agreement and the carrying out of the transactions contemplated hereby. However, transfer taxes on the transfer of the Seil Stock, if any, shall be born by Seil.

11. ENTIRE AGREEMENT; MODIFICATION OF AGREEMENT

This Agreement contains the entire agreement and understanding of the parties hereto with respect to Seil's redemption of Seil Stock from Amtech and supersedes any other oral or written agreements or understandings with respect thereto, which agreements or understandings, if any, are hereby terminated. This Agreement may not be altered, modified or changed in any manner whatsoever except by a writing signed by Amtech, Seil and KIG.

13. SUCCESSORS AND ASSIGNS

The terms of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, the successors and assigns of the parties hereto. Seil shall have the right to assign its rights and obligations under this Agreement to replacement investor; provided, however, that Seil shall remain liable with respect to its obligations hereunder.

14. GOVERNING LAW; LEGAL PROCEEDINGS

Notwithstanding the termination of the JVC Agreement at the Closing, the dispute resolution, arbitration and governing law applicable to this Agreement shall be as provided in Article 23 of the JVC Agreement as if fully setforth herein. Furthermore, this

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Agreement is written in the English language and executed in three (3) counterparts, each of which shall be deemed an original. The English language text of this Agreement shall prevail over any translation thereof. Any provision or clause hereof which shall be invalidated by virtue of the fact that it is prohibited by law shall be ineffective to the extent of such illegality; however, this shall in no way affect the remaining provisions of this Agreement, and this Agreement shall be interpreted as if such clause or provision were not contained herein, unless such ineffective provision or clause shall be so significant as to materially affect the parties' expectations regarding this Agreement.

15. COUNTERPARTS

This Agreement may be executed and delivered in a number of counterparts, each of which, when so executed and delivered, shall be an original and all of such counterparts shall together constitute one and the same Agreement.

IN WITNESS WHEREOF, the parties have duly executed this Agreement on the date first above written.

AMTECH, INC.

SEIL SEMICON, INC.

By _____
J. S. Whang, President & CEO

By _____
Seung Kag Hong, President

INDIVIDUAL INVESTORS

By _____
Mr. Seung Kag Hong

By _____
Mr. A.G. Lee

By _____
Jae-Im Ko

CERTIFICATE OF TERMINATION

DATE:

Pursuant to the terms and conditions in the Joint Venture Termination & Stock Redemption Agreement, each of the undersigned does hereby agree to the termination of the Joint Venture Agreement dated September 30, 1995, as revised per the Amendment Agreement dated November 23, 1995, and further agrees that all rights and obligations arising out of that agreement are terminated. This Certificate of Termination shall be effective when Amtech Systems, Inc., Seil Semicon, Inc., Seung Kag Hong, Jae-Im Ko, his wife, and A.G. Lee have all signed this Certificate of Termination or another one with the same content and Amtech has received the redemption price.

IN WITNESS WHEREOF, the parties have duly executed this Agreement on the date first above written.

AMTECH, INC.

SEIL SEMICON, INC.

By _____
J. S. Whang, President & CEO

By _____
Seung Kag Hong, President

INDIVIDUAL INVESTORS

By _____
Mr. Seung Kag Hong

By _____
Jae-Im Ko

By _____
Mr. A.G. Lee

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

EXHIBIT 11

SCHEDULE OF COMPUTATION OF NET INCOME PER SHARE

FOR THE YEARS ENDED SEPTEMBER 30, 1996, 1995 AND 1994

<TABLE>
<CAPTION>

	1996	1995	1994
<S>	<C>	<C>	<C>

PRIMARY			

Average number of common shares outstanding	4,175,728	3,802,853	1,890,702
Incremental shares attributable to warrants/options	2,165,299	--	38,382
	-----	-----	-----
Total shares used in the calculation	6,341,027	3,802,853	1,929,084
	=====	=====	=====
Income from continuing operations	\$ 197,591	\$ 171,053	\$ (89,469)
Interest net of tax assumed to be earned on additional short-term investments	145,981	--	--
	-----	-----	-----
Income from continuing operations as adjusted	\$ 343,572	\$ 171,053	\$ (89,469)
	=====	=====	=====
Earnings per share - continuing	\$.05	\$.04	\$ (.05)
Net income	\$ 508,683	\$ 226,568	\$ 94,004
Interest net of tax assumed to be earned on additional short-term investments	145,981	--	--
	-----	-----	-----
Adjusted net income	\$ 654,664	\$ 226,568	\$ 94,004
	=====	=====	=====
Earnings per share	\$.10	\$.06	\$.05

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

EXHIBIT 11 - CONTINUED

SCHEDULE OF COMPUTATION OF NET INCOME PER SHARE

FOR THE YEARS ENDED SEPTEMBER 30, 1996, 1995 AND 1994

	1996	1995	1994
<S>	<C>	<C>	<C>

FULLY DILUTED			

Average number of common shares outstanding	4,175,728	3,802,853	1,929,084
Incremental shares attributable to warrants/options	2,165,299	--	516
	-----	-----	-----
Total shares used in the calculation	6,341,027	3,802,853	1,929,600
	=====	=====	=====
Income from continuing operations	\$ 197,591	\$ 171,053	\$ (89,469)
Interest net of tax assumed to be earned on additional short-term investments	134,072	--	--
	-----	-----	-----
Income from continuing operations as adjusted	\$ 331,663	\$ 171,053	\$ (89,469)
	=====	=====	=====

Earnings per share - continuing	\$.05	\$.04	\$ (.05)
Net income	\$ 508,683	\$ 226,568	\$ 94,004
Interest net of tax assumed to be earned on additional short-term investments	134,072	--	--
	-----	-----	-----
Adjusted net income	\$ 642,755	\$ 226,568	\$ 94,004
	=====	=====	=====
Earnings per share	\$.10	\$.06	\$.05

</TABLE>

EXHIBIT 22

SUBSIDIARIES OF THE REGISTRANT

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

Consent of Independent Public Accountants

As independent public accountants, we hereby consent to the incorporation of our report included in this Form 10-K, into the Company's previously filed Registration Statements on Forms S-3 and Forms S-8 (File Numbers 333-09917, 333-10117, 333-09911 and 333-09909).

ARTHUR ANDERSEN LLP

Phoenix, Arizona
December 9, 1996.

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5

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE BALANCE SHEETS AS OF SEPTEMBER 30, 1996 AND SEPTEMBER 30, 1995, AND THE STATEMENTS OF OPERATION AND THE STATEMENTS OF CASH FLOW FOR THE THREE YEARS ENDED SEPTEMBER 30, 1996 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED SEPTEMBER 30, 1996.

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U.S. DOLLARS

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