SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [FEE REQUIRED]

For the fiscal year ended March 30, 1997

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 1-5560

Alpha Industries, Inc.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	04-2302115 (I.R.S. Employer Identification No.)
20 Sylvan Road, Woburn, Massachusetts (Address of principal executive offices)	01801 (Zip Code)
Registrant's telephone number, including area code:	(617) 935-5150

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $.25 par value	American Stock Exchange
Rights to purchase Common Stock	American Stock Exchange

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

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No

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

The aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant at May 30, 1997 was approximately $68,216,000.

The number of shares of Common Stock outstanding at May 30, 1997 was 10,000,066.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Proxy Statement, to be filed within 120 days of the end of the Registrant's fiscal year are incorporated by reference into Part III of this Report.

The Exhibit Index is located on page 38.

PART I

Item 1 Business

Products

The Company categorizes its product lines and core technologies as follows:

- Radio Frequency (RF), Microwave and Millimeter Wave Integrated Circuits (ICs)
- Discrete Semiconductors and Passive Components
- Ceramic Products

The chart below identifies the major markets currently served by each of the Company's product lines. In addition, the Company's products serve other wireless markets.

[CHART APPEARS HERE]

MARKETS	PRODUCTS		
	ICs	Discrete Semiconductors & Passive Components	Ceramic Products
Cellular Personal Communications Services (PCS)			
Handset	x	x	
Base Station	x	x	x
Digital Radio Links	x	x	x
Wireless Cable TV	x	x	x
Satellite Communications	x	x	
Defense-Related Systems	x	x	x
Pagers		x	x
Global Positioning Systems (GPS)		x	x
Cordless Telephones		x	x

RF, Microwave and Millimeter Wave ICs. The Company designs and manufactures RF, microwave and millimeter wave ICs in Gallium Arsenide (GaAs) that integrate numerous functions performed by discrete semiconductors. The functions of the Company's GaAs ICs include amplification, switching and control and frequency conversion of signals in the radio transceiver portion of wireless communications systems. In wireless voice and data applications, the Company's GaAs ICs are used in the handheld unit, base station transceivers and point to point radio links between the base station and local wireline network. The Company's millimeter wave ICs connect transmissions between base stations, including the local wireline PBX switching office.

Discrete Semiconductors and Passive Components. The Company fabricates discrete surface mount semiconductors in both GaAs and silicon as stand alone components for specialized applications which are not addressed efficiently by ICs. Silicon technology continues to be used for discrete semiconductors when circuit integration is not possible or for certain applications for which the properties of silicon material provide better performance. Discrete semiconductors are used for amplification, switching and control and frequency conversion in base stations, transmitters and receivers of cellular handsets. In addition, the Company has recently introduced a complementary line of passive semiconductor based components including couplers, power dividers and mixers in both GaAs and silicon utilizing similar surface mount packaging techniques.

Ceramic Products. The Company's ceramic products play a critical role in the signal selection, or filtering process, that is essential to processing communications signals. The physical properties of ceramic materials are suitable for power efficiency and miniaturization. The Company is a major supplier of miniature ceramic antennas to manufacturers of GPS receivers, particularly for compact handheld units which are gaining popularity. Ceramic products are crucial in the frequency-determining portions of direct broadcast satellite television (DBS TV) receivers, radar detectors and intrusion alarms. They are also shrinking the size of cellular radio base station equipment.

The principal customers for these products are equipment manufacturers for commercial and defense microwave systems such as cellular telephones, commercial telecommunications, direct broadcast satellites, and military radar, missile, and electronic warfare.

The Company's operations are within a single segment of the electronics industry: the development, production and sale of microwave materials, devices and components.

Markets and Distribution

During fiscal 1997, approximately 79% of the Company's sales were to manufacturers of commercial products, primarily in the wireless communications markets and include components for products such as wireless telephones and base stations in addition to motion detectors and sensors. The remaining 21% of sales were for use in a wide variety of defense-related systems.

Export sales to non-affiliates for fiscal 1997, 1996, and 1995 were $26,720,000, $23,633,000, and $16,855,000, respectively. This compares with domestic sales for the same period of $53,168,000, $66,081,000, and $54,974,000, respectively. During fiscal 1997, the Company operated a sales subsidiary in the United Kingdom and a ceramic manufacturing operation in France. At the end of fiscal 1997, the Company sold its ceramic manufacturing operation in France. During fiscal 1996, the Company closed its sales subsidiary in Germany and replaced it with an independent sales representative and distributor. See Note 2 to the Consolidated Financial Statements on page 25 for financial information about the Company's foreign and domestic operations.

The Company's sales are made through 13 independent domestic sales representatives and 23 independent international sales representatives, as well as through its own sales force of 34 persons. Approximately 12% of the Company's sales are made through its own direct sales force and 88% through sales representatives.

Research and Development

The Company's products and markets are subject to continued technological advances. Recognizing this, the Company has maintained a high level of R&D activities to remain competitive in certain areas and to be an industry leader in other areas.

Company sponsored R&D expenditures for the fiscal years 1997, 1996, and 1995 were $9.5 million, $9.1 million, and $4.2 million, respectively.

Raw Materials

Raw materials for the Company's products and manufacturing processes are generally available from several sources. It is the Company's policy not to depend on a sole source of supply. However, there are limited situations where the Company procures certain components and services for its products from single or limited sources. The Company purchases these materials and services on a purchase order basis, does not carry significant inventories and does not have any long-term supply contracts with its source vendors. The

inability of the Company to obtain these materials in required quantities would result in significant delays or reductions in product shipments, which would materially and adversely affect the Company's operating results.

Working Capital

The business of the Company is not seasonal, and there are no special practices with respect to working capital for the Company or the industry in general. The Company provides a limited warranty on its products against defects in material and workmanship. Payment terms are 30 days in the domestic market and generally 60 days in foreign markets.

Contracts

During fiscal 1997, one customer accounted for approximately 11% of the Company's total sales. All of the Company's sales to the United States Government and prime contractors and subcontractors thereof are subject to termination at the convenience of the Government, in which event the Company would normally be reimbursed for costs incurred. While U.S. Government orders are canceled in this manner, Alpha has seldom experienced any material terminations for convenience.

Competitive Conditions

The Company competes on the basis of price, performance, quality, reliability, size, ability to meet delivery requirements and customer service and support. The Company experiences intense competition worldwide from a number of multinational companies that offer a variety of competitive products and broader product lines, and which have substantially greater financial resources and production, marketing, manufacturing, engineering and other capabilities than the Company. The Company also faces competition from a number of smaller companies. In addition, the Company's customers, particularly its largest customers, may have or could acquire the capability to develop or manufacture products competitive with those that have been or may be developed or manufactured by the Company.

Patent and Trademarks

Alpha owns a small number of patents and has other patent applications under preparation or pending. However, the Company believes that its technological position depends primarily on the ability to develop new innovative products through the technical competence of its engineering personnel.

Backlog

The Company's backlog of undelivered orders on March 30, 1997 was approximately $32,500,000 compared with $36,500,000 on March 31, 1996. The Company's policy is to record commercial orders on a quarterly basis consistent with expected customer short-term requirements. Management believes all orders in the Company's backlog to be firm. Approximately 90% of the March 30, 1997 backlog is anticipated to be shipped in fiscal 1998.

Environmental Regulations

In the Company's opinion, compliance with federal, state, and local environmental protection regulations does not and will not have a material effect on the capital expenditures, earnings, and competitive position of the Company.

Executive Officers

The following table sets forth certain information with respect to the executive officers of the Company at May 31, 1997.

Name	Age	Position
George S. Kariotis	74	Chairman of the Board of Directors
Thomas C. Leonard	62	Director, President and Chief Executive Officer
Paul E. Vincent	49	Vice President, Chief Financial Officer and Treasurer
David J. Aldrich	40	Vice President
Jean Pierre Gillard	53	Vice President
Richard Langman	50	Vice President, President of Trans-Tech, Inc.
James C. Nemiah	43	Secretary Corporate Counsel

All officers serve until the next Board of Directors meeting following the Annual Meeting of Stockholders scheduled for September 8, 1997, or until their successors are elected and qualified. No officer was elected pursuant to any arrangement or understanding.

Mr. Kariotis was Chairman of the Board and Chief Executive Officer from 1962 (when the Company was founded) until 1978, and, from 1974 to 1978, he was also Treasurer of the Company. From 1979 to 1983, Mr. Kariotis was the Secretary of Manpower Development and Economic Affairs for the Commonwealth of Massachusetts. He was re-elected Chairman of the Board of the Company in 1983 and Chief Executive Officer in 1985. Mr. Kariotis resigned as Chief Executive Officer in July 1986 while he campaigned for public office. He resumed his position as Chief Executive Officer in November 1986, and served in that capacity until 1991.

Mr. Leonard joined the Company in 1992 as General Manager of the Components and Systems Division. He became the General Manager of Operations for the Alpha Microwave Division effective January 1994 and was elected Vice President in 1994. Mr. Leonard was elected President, Chief Executive Officer and Director in July 1996. Mr. Leonard has over 30 years experience in the microwave industry, having held a series of general managerial and marketing positions at M/A-COM, Inc., from 1972 to 1992 and prior to 1972 at Varian Associates and Sylvania.

Mr. Vincent joined the Company in 1979 and was the Controller from 1979 to 1997. In January 1997, Mr. Vincent was appointed Vice President, Chief Financial Officer and Treasurer. Mr. Vincent is a Certified Public Accountant.

Mr. Aldrich joined the Company in 1995 as Vice President, Chief Financial Officer and Treasurer. In May 1996 Mr. Aldrich was also appointed General Manager of Alpha Microwave. In January 1997, he relinquished his positions as Chief Financial Officer and Treasurer. From 1989 to 1995, Mr. Aldrich held several positions at M/A-COM, Inc., including Manager Integrated Circuits Active Products, Corporate Vice President Strategic Planning, Director of Finance and Administration, and Director of Strategic Initiatives with the Microelectronics Division. Prior to joining M/A-COM, Inc., Mr. Aldrich was Controller with Adams Russell Electronics Company from 1984 to 1989 and a project leader for a NASA satellite communications program with Space Communications Company (a Fairchild Industries and Contel Inc.

Partnership) from 1981 to 1983. Mr. Aldrich is a Director of Microwave Power Devices, Inc., a wireless high-power amplifier company.

Mr. Gillard joined the Company in November 1990 as Director of GaAs IC Products. In June 1996, he was named as the Company's Vice President of Business Development. Before joining Alpha, Mr. Gillard held a number of Vice President positions at M/A-COM, Inc. in Sales, Marketing and Business Development. Mr. Gillard received his engineering education at Ecole Central d'Electronique, Paris, France and his business training at the Massachusetts Institute of Technology's Sloan School.

Mr. Langman joined the Company in January 1997, as Vice President of Alpha Industries, Inc., and President and General Manager of Trans-Tech, Inc. Prior to joining Alpha and Trans-Tech, Mr. Langman worked for Coors Ceramics Company for twenty-three years, holding senior executive positions in operations and sales. Mr. Langman received his B.S. in Ceramic Engineering from Alfred University and his M.S. in Metallurgy and Material Science from Lehigh University.

Mr. Nemiah joined the Company in November 1995 as Corporate Counsel and Assistant Secretary. He was named Secretary in September 1996. Prior to joining the Company, Mr. Nemiah was at American Science and Engineering from 1987 to 1995, holding the positions of Vice President, General Counsel and Clerk.

Employees

As of March 30, 1997, the Company and its subsidiaries employed approximately 800 persons, compared with 990 persons as of March 31, 1996.

Item 2 Properties

The following information describes the major facilities owned and leased by the Company. The Company believes it has adequate production capacity to meet its current business needs for the next 12 to 18 months. As described in Note 4 to the Consolidated Financial Statements on pages 27 and 28, several properties secure debt of the Company.

a) The Company owns a 158,000 square foot plant plus eight acres of land at 20 Sylvan Road, Woburn, Massachusetts. This plant is occupied by the semiconductor and component manufacturing operations and corporate headquarters.

b) The Company owns a 92,000 square foot facility in Adamstown, Maryland. This plant is occupied by the Company's wholly owned subsidiary, Trans-Tech, Inc., and is utilized as the Company's primary ceramic products manufacturing facility.

c) The Company leases a 33,000 square foot facility in Frederick, Maryland. This plant is used by the Company's wholly owned subsidiary, Trans-Tech, Inc., to manufacture ceramic filters.

d) The Company leases 60,000 square feet of space in Frederick, Maryland. This facility is currently substantially unoccupied and the Company is seeking a sub-tenant for the entire facility.

Item 3 Legal Proceedings

The Company does not have any material pending legal proceedings other than routine litigation incidental to its business.

The Company has been notified by federal and state environmental agencies of its potential liability with respect to the Spectron, Inc. Superfund site in Elkton, Maryland. Several hundred other companies have also been notified about their potential liability regarding this site. The Company continues to deny that it has any responsibility with respect to this site other than as a de minimis party. Management is of the opinion that the outcome of the aforementioned environmental matter will not have a material effect on the Company's operations.

See also Note 9 to the Consolidated Financial Statements on page 35.

Item 4 Submission Of Matters To A Vote Of Security Holders

There were no matters submitted to a vote of security holders during the fiscal quarter ended March 30, 1997.

PART II

Item 5 Market For The Registrant's Common Stock And Related Stockholder Matters

See the section entitled "Quarterly Financial Data" appearing on page 22 for information regarding Common Stock market prices. Dividends have not been paid in either of the past two fiscal years. See Note 4 to the Consolidated Financial Statements appearing on pages 27 and 28 for information regarding dividend restrictions.

Item 6 Selected Financial Data

Five Year Financial Summary
(In thousands, except per share amounts and financial ratios)

	Fiscal Year				
	1997	1996	1995	1994	1993
Results of Operations					
Sales	$ 85,253	$ 96,894	$78,254	$ 70,147	$69,543
Net income (loss)	(15,572)	3,794	2,847	(11,466)	(2,987)
Per share data					
Net income (loss)	$ (1.58)	$ .43	$ .36	$ (1.53)	$ (.40)
Weighted average common shares	9,848	8,755	7,882	7,502	7,464
Financial Ratios					
Return (based on net income-net loss)					
On sales	(18.3%)	3.9%	3.6%	(16.3%)	(4.3%)
On average assets	(22.1%)	6.0%	6.0%	(23.4%)	(5.6%)
On average equity	(30.9%)	8.9%	11.0%	(38.3%)	(8.1%)
Current Ratio	2.10	3.35	1.68	1.64	2.26
Debt to Equity	8.3%	4.5%	17.1%	19.9%	11.8%
Financial Position					
Working Capital	$ 18,409	$ 32,647	$10,983	$ 8,981	$15,767
Additions to property, plant and equipment	7,951	12,297	5,248	2,939	4,112
Total assets	65,253	75,423	50,167	44,430	53,777
Long-term debt	3,606	2,565	4,744	4,826	4,191
Long-term capital lease obligations	8	565	754	892	1,032
Stockholders' equity	43,386	57,533	27,674	24,261	35,565
Other Statistics					
New orders (net of cancellations)	81,300	103,200	84,900	66,700	70,500
Backlog at year end	$ 32,500	$ 36,500	$30,200	$ 23,500	$26,900

Item 7 Management's Discussion And Analysis Of Financial Condition And Results Of Operations

Fiscal 1997 Compared to Fiscal 1996

General

Despite a difficult 1997 fiscal year, in which the Company lost $15.6 million, changes and improvements completed by the end of the year have strengthened the Company and positioned it for profitability in the first quarter (ending June 1997) of the 1998 fiscal year.

The Company's losses in the year were largely the result of an industry-wide over-supply of cellular telephones and related equipment, especially in the North American cellular telephone market, as well as operational difficulties at Trans-Tech, Inc. (TTI), the Company's ceramic component subsidiary. Following a period of extremely strong demand from the Company's customers, many of the Company's customers announced, early in the fourth quarter of the 1996 fiscal year, that they had excessive finished goods inventory, leading them to cut back on existing component orders to the Company and to delay future orders.

In July 1996, Thomas C. Leonard was asked by the Board of Directors to take over as President and CEO of the Company. Mr. Leonard had been a Vice President at Alpha for almost four years, concentrating on turning around and improving troubled operations within Alpha Microwave.

Alpha Microwave, the Company's Gallium Arsenide (GaAs) Integrated Circuits (ICs) and semiconductor division, operated at virtually break-even for the year, as it continued to invest for increased capacity and market penetration. In May 1996, David J. Aldrich became General Manager of Alpha Microwave and began to institute a series of changes that strengthened the division and prepared it for fast growth when the market returned. Throughout the fiscal year, plans continued to increase capacity, and in the fourth quarter of fiscal 1997, conversion from 3 inch to 4 inch diameter GaAs wafers and the addition of a third shift resulted in a 2.5 to 3-fold increase in the division's capacity to manufacture GaAs ICs. Restructuring of the sales and marketing organizations in the division allowed a tight focus on "strategic customers", the largest original equipment manufacturers in the wireless telephone industry. As a result of all of these actions, Alpha Microwave was profitable in the last two quarters of fiscal 1997.

Trans-Tech was particularly hard-hit by the slump, because of operating inefficiencies, which had increased costs and adversely affected shipments to customers. These problems led the Company to seek new management for Trans-Tech - -- a process that was completed only late in January 1997, with the arrival of Richard Langman as the new President and General Manager of Trans-Tech.

Analysis of the Trans-Tech situation first by Mr. Leonard and then by Mr. Langman, indicated operational problems, made more painful by the loss of orders from customers who had been disappointed by Trans-Tech's late and unpredictable deliveries. This reduction in order volume at Trans-Tech persisted even as order volume rose in other parts of the Company, which confirmed the decision to divest or close higher-cost, redundant manufacturing operations in France and California. Legal issues in France delayed the sale of the French subsidiary until the end of the fourth quarter, but both operations were disposed of during the fiscal year. These divestitures reduced costs and eliminated excess capacity, without any reduction of product offerings.

Also in the fourth quarter, Trans-Tech conducted a significant reduction in force, largely among support personnel and narrowed the focus of its development activities, in order to bring its cost structure in line with its reduced level of business. Also in the fourth quarter, Alpha Microwave sold a small product line consisting of digital radio subsystems.

At the beginning of the year, the Company's break-even was at approximately $25 million per quarter; by the end of the year, with the completion of all of the actions described above, the break-even was at $21-22 million. As a result, the Company announced that all non-recurring events were complete during fiscal 1997 and projected profitability in the first quarter of fiscal 1998.

Results of Operations

Sales for fiscal 1997 totaled $85.3 million compared to sales of $96.9 million in fiscal 1996. The decrease in fiscal 1997 sales was primarily the result of lower sales volumes at Trans-Tech from the factors discussed above. In contrast, sales of semiconductors and GaAs ICs at Alpha Microwave were lower in the first quarter than in the fourth quarter of fiscal 1996, but showed continued modest growth throughout the year. The Company continued to increase its focus on the commercial wireless markets as military sales declined to 21% of fiscal 1997 sales , compared with 24% in fiscal 1996. The Company will continue to participate in military programs with low risk and those that provide funding for the development of technology that is transferable to commercial wireless applications.

Gross profits for fiscal 1997 totaled $16.7 million as compared to $30.9 million in fiscal 1996. The decrease in gross profit in fiscal 1997 was the result of: (i) excess manufacturing capacity at Trans-Tech that was adjusted in the fourth quarter with the divestiture of the French subsidiary and the consolidation at Trans-Tech; (ii) carrying costs of approximately $2.7 million for the two divested operations (incurred prior to divestiture); (iii) a $2.6 million inventory write-down at Trans-Tech resulting from shifts in demand away from certain ceramic products; and (iv) decisions to continue expanding capacity at Alpha Microwave during the year in spite of lower Company-wide sales volumes for the first half of the year. Excluding certain non-recurring costs, primarily the carrying costs and inventory write-down identified above, the Company's gross profit as a percentage of sales would be 27% for fiscal 1997 and 31% for the fourth quarter of fiscal 1997.

Company sponsored research and development expenses increased in fiscal 1997 to $9.5 million, or 11% of sales from $9.1 million, or 9% of sales in fiscal 1996. The continued level of research and development expenses reflects the Company's strong commitment to its investment in the GaAs IC product line. The Company is dedicated to supporting high volume applications for wireless customers and will continue to invest in product and process development to better serve its targeted markets. The Company expects a reduction in quarterly R&D of approximately $200 to $300 thousand, due to the refocusing of TTI and the discontinued investment in the digital radio product group. However, the Company will continue to increase investments in high volume wireless products.

Selling and administrative expenses increased to $20.4 million, or 24% of sales, in fiscal 1997 compared to $17.2 million, or 18% of sales, in fiscal 1996. The increase in selling and administrative expenses for fiscal 1997 reflects expanded investments in the Company's sales activities. These investments included the addition of dedicated account managers for key wireless OEM manufacturers and improvements to the Company's information systems, such as adding Electronic Data Interchange (EDI) capabilities. Also included in fiscal 1997 selling and administrative expenses are non-recurring costs of $900 thousand for severance costs related to various corporate executives and $626 thousand for recruiting and consolidation costs associated with TTI.

Interest expense decreased $189 thousand for fiscal 1997 compared to the same period last year. Interest income increased $43 thousand for fiscal 1997 compared to fiscal 1996. During the third quarter of fiscal 1996, the Company received funds from a secondary offering that were used to reduce debt and increase short-term investments which resulted in decreased interest expense and increased interest income. Other expense and income decreased $87 thousand in fiscal 1997 compared with fiscal 1996. These fluctuations were due to currency gains and losses.

The Company did not record a tax provision for fiscal 1997. No federal taxes were due, and state and foreign taxes were offset by a state loss carryback. The Company is expected to have a below normal tax rate due to net operating loss carryforwards of approximately $36 million which expire beginning in fiscal 2004.

The Company reported a net loss of $15.6 million or $1.58 per share compared with net income of $3.8 million or $0.43 per share for fiscal 1996.

Financial Position

At March 30, 1997, working capital totaled $18.4 million and included $7 million in cash, cash equivalents, and short-term investments, compared with $32.6 million of working capital at the end of fiscal 1996. Cash decreased $5.5 million during fiscal 1997 as a result of a $15.6 million loss, further investments in capital expenditures and a reduction in accounts payable.

Capital expenditures of approximately $8 million were used primarily for continued automation of the semiconductor wafer fab operations and the IC and discrete semiconductor assembly and test areas, as well as for improved manufacturing capabilities at the ceramics manufacturing facility. During fiscal 1997, the Company was successful in converting its existing 3 inch GaAs wafer line to 4 inch wafers. A portion of the capital expenditures during the year was funded by a $5 million equipment line of credit, which was subsequently converted to a term note. The Company remains committed to adding the required capacity needed to service the wireless markets as demand continues to grow. The Company currently anticipates investing approximately $10 million in capital expenditures during fiscal 1998.

With cash, cash equivalents, and short-term investments of $7 million and a $7.5 million working capital line of credit available until October 1, 1997, the Company believes it has adequate funds to support its current operating and capital investment needs. At March 30, 1997, $1 million was borrowed under the line of credit. As in the past, the Company intends to renew the line of credit when it matures. Also, the Company will continue to evaluate other available sources of financing, such as sale leasebacks or borrowing against its debt-free Massachusetts facility.

Other Matters

Inflation did not have a significant impact upon the results of operations of the Company during the three year period ended March 30, 1997.

In February 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 128, "Earnings per Share" ("SFAS 128"). SFAS 128 establishes a different method of computing net income per share than is currently required under the provisions of Accounting Principles Board Opinion No. 15. Under SFAS 128, the Company will be required to present both basic net income per share and diluted net income per share. The impact on diluted net income per share is not expected to be material. The Company plans to adopt SFAS 128 in its fiscal quarter ending December 1997 and at that time all historical net income per share data will be restated to conform to the provisions of SFAS No. 128.

Fiscal 1996 Compared to Fiscal 1995

General

The Company set record levels for sales and orders for fiscal 1996, and earnings increased 33% in fiscal 1996 as compared with the prior year. In fiscal 1996, the Company doubled its investments in product development mainly for the Gallium Arsenide Monolithic Integrated Circuits (GaAs MMICs) and ceramic products aimed at the wireless communication markets. At the same time, the Company increased unit output by 64% due to improved manufacturing efficiencies and added capacity for both semiconductor and ceramic products. These actions positioned the Company to support higher demands, particularly for wireless communication products. Unfortunately, an overall softness in the North American cellular market and the delayed roll-out of the Personal Communications System (PCS) was expected to result in lower demand throughout the summer of 1996.

Results Of Operations

Sales for fiscal 1996 increased 23.8% to $96.9 million as compared to sales of $78.3 million in fiscal 1995. The increase in sales was attributable to increased unit volume in the Company's GaAs MMIC, ceramic and discrete semiconductor product lines primarily into the commercial wireless markets. These unit volume increases were partially offset by a decline in average selling prices because of the Company's shift to high volume business in the commercial sector. As the Company continued to gain strength in the commercial wireless markets, direct sales to the United States Defense Department continued to decline, with 24% of fiscal 1996 sales related to military subcontracts for ultimate sale to the Defense Department or foreign governments, compared with 29% in fiscal 1995. The decrease in defense related business was attributable to the decline in traditional military products and reduced funding for certain weapons systems.

Gross profit increased 29.4% in fiscal 1996 to $30.9 million, or 31.9% of sales, as compared to $23.9 million, or 30.5% of sales in fiscal 1995. The improvement in gross profit was the result of: (a) increased sales volumes, (b) higher capacity utilization at the Company's Woburn, Massachusetts manufacturing facility and (c) greater efficiencies due to the consolidation of facilities that took place in fiscal 1994 when the Company moved several product lines to its Woburn, Massachusetts plant. The Company recorded lower margins in the fourth quarter of fiscal 1996 as a result of flattening sales and rising costs due to added manufacturing capacity.

Research and development expenses increased 120.2% in fiscal 1996 to $9.1 million, or 9.4% of sales, from $4.2 million, or 5.3% of sales in fiscal 1995. This increase reflects the continued investment by the Company in the GaAs MMIC and ceramic product lines. The Company will continue to invest in product and process development in order to address the demands of its targeted wireless markets. Customer sponsored R&D decreased $3.4 million in fiscal 1996 and $1.9 million in fiscal 1995. As customer sponsored R&D continued to decrease, the Company sponsored R&D will continue to increase since the Company is strongly committed to developing new wireless communications products. However, whenever possible the Company will try to fund its R&D through collaborative developmental contracts.

Selling and administrative expenses increased to $17.2 million, or 17.8% of sales, in fiscal 1996. The increase in selling and administrative expenses was primarily a result of training and other costs related to the early phases of implementation of a new manufacturing and management information system, as well as increased commissions related to higher sales volume.

Interest expense remained relatively constant for fiscal 1996 and 1995.

Interest income increased $315 thousand largely due to interest earned on funds received from a stock offering that was completed during the third quarter of fiscal 1996. The Company successfully completed a secondary public offering which raised $25.3 million, net of expenses, on the sale of 1,840,000 shares of

common stock. Other expense and income increased by $43 thousand in fiscal 1996 compared with fiscal 1995. This fluctuation was due to currency gains and losses.

The Company's effective tax rate for fiscal 1996 was 15% compared to the current combined federal, state and foreign rate of approximately 40%. This rate differed from statutory rates primarily as a result of the utilization of net operating loss carryforwards. At March 31, 1996, the Company had available net operating loss carryforwards of approximately $25 million which will expire commencing in 2004.

Net income for fiscal 1996 was $3.8 million or $0.43 per share versus $2.8 million or $0.36 per share for fiscal 1995. The first quarter of fiscal 1996 included a repositioning credit of $320 thousand or $0.03 per share which resulted from the reversal of certain accruals for estimated carrying costs as a result of an earlier than expected disposition of the Methuen, Massachusetts facility. Per share data reflected the stock offering completed in the third quarter of fiscal 1996.

Financial Position

At March 31, 1996, working capital totaled $32.6 million and included $15.5 million in cash, cash equivalents, and short-term investments, compared with $11.0 million of working capital at the end of fiscal 1995. Cash increased $7.8 million during fiscal 1996 mainly as a result of proceeds received from the secondary public offering. During fiscal 1996, the Company had $12.3 million of capital expenditures primarily for the expansion of its ceramic manufacturing facilities, further automation of its semiconductor wafer fab operations, and various information technology equipment. In addition to the proceeds received from the offering, the Company also had two lines of credit available for a total of $12.5 million. The Company entered into a $7.5 million working capital line of credit agreement which was to expire on August 1, 1997, and a $5 million equipment line of credit which was to expire on July 31, 1996. At March 31, 1996 there was $1 million outstanding under the equipment line of credit.

In July 1995, the Company sold its Methuen, Massachusetts plant and received net proceeds of $2.5 million. In connection with the sale, using the net proceeds and $1 million borrowed under its line of credit, the Company retired $3.5 million of related debt.

Forward-Looking Statements

Except for the historical information contained herein, the discussion in this Report contains certain forward-looking statements that involve risks and uncertainties, such as statements of the Company's plans, objectives, expectations and intentions. The cautionary statements made in this Report should be read as being applicable to all forward-looking statements wherever they appear in this Report. The Company's actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences are discussed below.

Recent Market Softness. During the fiscal year, a glut of finished goods inventory, overall softness in the North American cellular market and the delayed roll-out of the Personal Communications System (PCS) significantly impacted the Company's orders and shipments. Although the Company believes that the market is currently strong and that the market problems that affected fiscal 1997 have been resolved, there can be no assurance that such inventory imbalance, market softness and delays attendant upon the introduction of new technologies will not occur in the future. Any such events could have a material and adverse effect on the Company's business, financial condition and operating results.

Repositioning of Company's Business. The Company has in recent years worked to reposition its business, away from military sales and into commercial sales. Military sales have been declining, and the Company anticipates that revenues from military sales will continue to decline. There can be no assurance that the Company's effort to reposition itself as a supplier of advanced products to wireless communications markets will be successful. If revenues from commercial wireless customers do not grow, or grow less rapidly than

expected, or if in the near term revenues from military sales decline more rapidly than expected, the Company's operating results could be materially and adversely affected.

Variability of Operating Results. The Company's quarterly and annual results have varied in the past and may vary significantly in the future due to a number of factors, including: cancellation or delay of customer orders; market acceptance of the Company's or its customers' products; variations in manufacturing yields; timing of announcement and introduction of new products by the Company and its competitors; changes in revenue and product mix; competition; changes in manufacturing capacity and variations in the utilization of this capacity; variations in average selling prices; variations in operating expenses; the long sales cycles associated with the Company's customer specific products; the timing and level of product and process development costs; cyclicality of the semiconductor and ceramic industries; the timing and level of non-recurring engineering revenues and expenses relating to customer specific products; and changes in inventory levels. Any unfavorable changes in these or other factors could have a material adverse effect on the Company's operating results. The Company's expense levels are based, in part, on its expectations as to future revenue, and certain of these expenses, particularly those relating to the Company's capital equipment and manufacturing overhead, are relatively fixed in nature. For example, the Company is investing in GaAs and silicon process development technology in anticipation of increased revenues from related markets. As a result of the relatively fixed nature of certain of the Company's expenses, operating results would be disproportionately and adversely affected by a reduction in revenue. The Company expects that its operating results will continue to fluctuate in the future as a result of these and other factors.

Customer Concentration. Historically, a significant portion of the Company's sales in each fiscal period has been concentrated among a limited number of customers. This trend is accelerating, and in recent periods sales to the Company's major customers as a percentage of total sales have increased. The Company does not generally enter into long-term contracts with its customers, and when it does, the contract is generally terminable for the convenience of the customer. If the Company were to lose one of these major customers, or if orders by a major customer otherwise were to decrease, or if major orders were to be canceled or deferred, the Company's business, financial condition and operating results would be materially and adversely affected.

Dependence on Customer Specific Products. Most of the Company's products are designed to be incorporated into specific end-user products. In light of short product life cycles in the wireless communications industry, the Company's future success depends upon its ability to select customer specific development projects which will result in sufficient production volume to enable the Company to recover its development costs and realize a profit on the project. There can be no assurance that the Company will be able to select such customer specific projects, or that the Company's products will be designed into such projects. In addition, OEMs require that their suppliers design and manufacture components very quickly. There can be no assurance that the Company will be able to design, manufacture in large volumes and deliver to its customers high quality, reliable products within the required time periods. The Company has experienced delays in the production of ICs, ceramic products and discrete semiconductors under major contracts with major OEM customers. There can be no assurance similar problems will not recur in the future. Any such problems could have a material and adverse effect on the Company's operating results.

Product And Process Development And Technological Change. The wireless communications industry is characterized by frequent new product introductions, evolving industry standards and rapid changes in product and process technologies. The Company believes that its future success will depend upon its ability to continue to improve its product and process technologies and develop new technologies. The success of the Company's new products is dependent upon many factors, including factors that are outside the Company's control. These factors include: the Company's ability to anticipate market requirements in its product development efforts; market acceptance and continued commercial success of OEM products for which the Company's products have been designed; the ability to adapt to technological changes and to support established and emerging industry standards; successful and timely completion of product

development and commercialization; achievement of acceptable wafer fabrication and ceramic process yields and manufacturing yields generally; and the ability to offer new products at competitive prices. No assurance can be given that the Company's product and process development efforts will be successful or that the Company's new products or those of its customers will achieve or sustain market acceptance. In addition, the wireless communications industry is characterized by end-user demands for increased functionality at ever lower prices. To remain competitive, the Company must obtain yield and productivity improvements and cost reductions and must introduce new products which incorporate advanced features and which therefore can be sold at higher average selling prices. To the extent that such cost reductions and new product introductions do not occur in a timely manner or the Company's or its customers' products do not achieve market acceptance, the Company's operating results could be materially and adversely affected.

Manufacturing Risks. The manufacturing processes for the Company's products, in particular its GaAs ICs, are highly complex and precise, requiring advanced and costly equipment, and are being modified continually in an effort to improve yields and product performance. The Company expects that its customers will continue to establish demanding specifications for quality, performance and reliability that must be met by the Company's products. The Company has limited experience in high volume manufacturing of certain GaAs ICs and ceramic products for the high volume commercial applications on which its current product development, sales and marketing efforts are focused. The Company has encountered and may in the future encounter development and manufacturing delays, has from time to time failed and may in the future fail to meet its customers' contractual specifications, and one or more of its products have contained and may in the future contain undetected defects or failures when first introduced or after commencement of commercial shipments. If such delays, defects or failures occur, the Company could experience lost revenue, resulting from delays in or cancellations or rescheduling of orders or shipments, product returns or discounts, or could experience increased costs, including product or process redesign, warranty expense or costs associated with customer support, any of which could have a material adverse effect on the Company's operating results. There can be no assurance that the Company will not in the future experience significant product quality, performance or reliability problems.

Management of Growth. The growth in the Company's business, and its continuing transition from military to commercial sales, has placed, and is expected to continue to place, a significant strain on the Company's personnel, management and other resources. In order to manage any future growth effectively, the Company will, among other things, be required to upgrade and expand certain manufacturing facilities; attract, train, motivate and manage employees successfully; and continue to improve its operational and financial systems. There can be no assurance that the Company will be successful in these respects. The Company is currently in the process of implementing a new management information system. There can be no assurance that the Company will not encounter problems or increased expense levels in connection with implementing its new management information system. In addition, the Company anticipates that any future growth of its business will require increased utilization of the Company's manufacturing capacity, including increasing the number of shifts during which its manufacturing facilities are operational. Further, any such future growth could require improvement or expansion of the Company's existing manufacturing facilities. Expansion or upgrade of the Company's manufacturing facilities will entail substantial capital expenditures. Lead times for certain capital equipment are long, and modification of the Company's facilities and installation of such equipment is a complex process which could disrupt the Company's ongoing manufacturing operations. Delays in completion of a planned expansion or upgrade could limit the ability of the Company to respond to the rapid design and production cycles required by its customers. Moreover, there can be no assurance that the Company will be able to secure sources of capital adequate to fund the necessary expenditures. The Company could experience product quality, performance or reliability problems and development and manufacturing delays in connection with any such increase in utilization or such expansion or upgrade of the Company's manufacturing capacity. The occurrence of any such problems or the inability of the Company otherwise to manage any future growth effectively could materially and adversely affect the Company's operating results.

Dependence on Key Personnel. The Company's future success depends in large part on the continued service of its key technical, marketing and management personnel, and on its ability to identify, attract and retain qualified technical personnel, particularly highly skilled design, process and test engineers involved in the manufacture of existing products and the development of new products and processes. The competition for such personnel is intense, and the loss of key employees could have a material adverse effect on the Company.

Cyclicality of the Company's Markets. While the semiconductor and ceramic markets have in the past experienced overall growth, they have historically been characterized by wide fluctuations in product supply and demand. From time to time, these industries have also experienced significant downturns, often in connection with, or in anticipation of, maturing product cycles and declines in general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity and subsequent accelerated price erosion, and in some cases have lasted for extended periods of time. The Company's business may in the future be materially and adversely affected by industry-wide fluctuations. The Company's continued success will depend in large part on the continued growth of the wireless communications industry. No assurance can be given that the Company will not be adversely affected in the future by cyclical conditions in the wireless communications industry.

Competition. Wireless communications markets are intensely competitive and are characterized by rapid technological change, rapid product obsolescence and price erosion. Currently, the Company competes primarily with manufacturers of high performance GaAs ICs, discrete silicon semiconductors, passive components, ceramic filters and other ceramic products and microwave and millimeter wave components. The Company expects increased competition both from existing competitors and others which may enter these markets, as well as potential future competition from companies which may offer new or emerging technologies, such as surface acoustic wave filters, silicon germanium and other silicon technologies. In addition, many of the Company's customers, particularly its largest customers, have or could acquire the capability to develop or manufacture products competitive with those that have been or may be developed or manufactured by the Company. The Company's future operating results may depend in part upon the extent to which these customers elect to purchase from outside sources rather than develop and manufacture their own systems. A number of the Company's competitors have significantly greater financial, technical, manufacturing and marketing resources than the Company. The ability of the Company to compete successfully depends in part upon the ability of the Company to develop price competitive, high quality solutions for OEMs and the extent to which customers select the Company's products over competitors' products for their systems. There can be no assurance that the Company will be able to compete successfully in the future.

Item 8 Financial Statements And Supplementary Data
Index To Financial Statements

Alpha Industries Inc. and Subsidiaries

Consolidated Balance Sheets
(In thousands except share and per share amounts)

	March 30, 1997	March 31, 1996
Assets (Note 4)		
Current assets		
Cash and cash equivalents	$ 5,815	$ 11,326
Short-term investments	1,218	4,143
Accounts receivable, trade, less allowance for doubtful accounts of $521 and $634	17,019	17,688
Inventories (Note 3)	10,267	12,015
Prepayments and other current assets	857	1,379
Total current assets	35,176	46,551
Property, plant and equipment		
Land	437	462
Building and improvements	22,659	22,788
Machinery and equipment	59,962	54,794
	83,058	78,044
Less-accumulated depreciation and amortization	54,450	49,908
	28,608	28,136
Other assets	1,469	736
Total Assets	$ 65,253	$ 75,423
Liabilities And Stockholders' Equity		
Current liabilities		
Notes payable, bank (Note 4)	$ 1,000	$ ---
Current maturities of long-term debt (Note 4)	1,939	332
Current maturities of capital lease obligations (Note 4)	230	443
Accounts payable	5,620	7,075
Repositioning reserve (Note 5)	1,106	---
Accrued liabilities		
Payroll, commissions and related expenses	5,359	4,898
Other	1,513	1,156
Total current liabilities	16,767	13,904
Long-term debt (Note 4)	3,606	2,565
Long-term capital lease obligations (Note 4)	8	565
Other long-term liabilities	1,486	856
Commitments and contingencies (Note 9)		
Stockholders' equity (Notes 4 and 7)		
Common stock par value $.25 per share: authorized 30,000,000 shares; issued 10,126,413 and 9,938,587 shares	2,531	2,484
Additional paid-in capital	54,640	53,468
Retained earnings (accumulated deficit)	(13,516)	2,056
	43,655	58,008
Less - Treasury shares 161,139 and 249,052 at cost	195	321
Unearned compensation-restricted stock	74	154
Total stockholders' equity	43,386	57,533
Total Liabilities and Stockholders' Equity	$ 65,253	$ 75,423

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

Consolidated Statements Of Operations
(In thousands except per share amounts)

	Year Ended March 30, 1997	March 31, 1996	April 2, 1995
Sales	$ 85,253	$96,894	$78,254
Cost of sales	68,519	65,986	54,376
Research and development expenses	9,545	9,148	4,154
Selling and administrative expenses	20,441	17,226	15,727
Repositioning expenses (credit) (Note 5)	2,074	(320)	---
	100,579	92,040	74,257
Operating income (loss)	(15,326)	4,854	3,997
Other income (expense)			
Interest expense	(554)	(743)	(728)
Interest income	415	372	57
Other (expense) income, net	(107)	(20)	23
	(246)	(391)	(648)
Income (loss) before income taxes	(15,572)	4,463	3,349
Provision for income taxes (Note 6)	---	669	502
Net income (loss)	$(15,572)	$ 3,794	$ 2,847
Net income (loss) per share	$(1.58)	$.43	$.36
Weighted average common shares and common share equivalents	9,848	8,755	7,882

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

Consolidated Statements Of Cash Flows
(In thousands)

	Year Ended March 30, 1997	March 31, 1996	April 2, 1995
Cash (used in) provided by operations:			
Net income (loss)	$ (15,572)	$ 3,794	$ 2,847
Adjustments to reconcile net income (loss) to net cash (used in) provided by operations:			
Depreciation and amortization of property, plant, and equipment	5,886	4,628	4,106
Amortization of unearned compensation - restricted stock	35	61	64
Unearned compensation	(11)	---	---
(Gain) loss on sales and retirements of property, plant, and equipment	---	(9)	26
Noncash portion of repositioning charges	660	---	---
(Gain) loss on property, plant and equipment due to repositioning	---	(320)	---
Increase in other assets	(262)	(395)	(536)
Increase (decrease) in other liabilities and long-term benefits	630	62	399
Issuance of treasury stock to 401(k)	831	220	12
Change in assets and liabilities			
Accounts receivable	771	(4,140)	(305)
Inventories	770	(2,645)	(1,757)
Prepayments and other current assets	318	(623)	(266)
Accounts payable	(1,455)	1,869	141
Accrued liabilities	818	(241)	1,237
Repositioning reserve	1,106	(991)	(967)
Net cash (used in) provided by operations	(5,475)	1,270	5,001
Cash used in investments:			
Additions to property, plant and equipment excluding capital leases	(7,951)	(11,972)	(4,971)
Purchases of short-term investments	(4,030)	(12,113)	---
Maturities of short-term investments	6,955	7,970	---
Net proceeds from sale of divestitures	1,191	---	---
Proceeds from sale of property, plant and equipment	---	31	68
Proceeds from sale of property held for resale	---	2,465	---
Net cash used in investments	(3,835)	(13,619)	(4,903)
Cash provided by financing:			
Proceeds from notes payable	4,952	621	1,983
Payments on notes payable	(1,304)	(5,807)	(330)
Payments on capital lease obligations	(437)	(441)	(416)
Deferred charges related to long-term debt	18	8	(6)
Exercise of stock options	462	392	391
Proceeds from sale of stock	108	25,392	99
Net cash provided by financing	3,799	20,165	1,721
Net decrease (increase) in cash and cash equivalents	(5,511)	7,816	1,819
Cash and cash equivalents, beginning of year	11,326	3,510	1,691
Cash and cash equivalents, end of year	$ 5,815	$ 11,326	$ 3,510

Supplemental disclosures:
Capital lease obligations of $325 thousand and $277 thousand were incurred during the years ended March 31, 1996, and April 2, 1995, respectively, when the Company entered into leases for new equipment. No new leases were entered into during the year ended March 30, 1997.
The accompanying notes are an integral part of these financial statements.

Consolidated Statements Of Stockholders' Equity
(In thousands)

	Common stock Shares	Common stock Par value	Additional paid-in capital	Retained earnings (Accumulated) (deficit)	Treasury stock	Unearned compensation restricted stock
Balance April 3, 1994	7,787	$ 1,947	$ 27,325	$ (4,585)	$ (331)	$ (95)
Net income	---	---	---	2,847	---	---
Employee Stock Purchase Plan	29	7	92	---	---	---
Issuance of restricted stock	31	8	139	---	---	(147)
Amortization of unearned compensation restricted stock	---	---	---	---	---	64
Issuance 1,110 treasury shares to ESOP	---	---	11	---	1	---
Exercise of stock options	147	37	354	---	---	---
Balance April 2, 1995	7,994	1,999	27,921	(1,738)	(330)	(178)
Net income	---	---	---	3,794	---	---
Stock offering net of expenses	1,840	460	24,802	---	---	---
Employee Stock Purchase Plan	17	4	126	---	---	---
Issuance of restricted stock	9	2	49	---	---	(51)
Amortization of unearned compensation restricted stock	---	---	---	---	---	61
Issuance 18,334 treasury shares to ESOP	---	---	197	---	23	---
Repurchase 4,500 shares of restricted stock	---	---	---	---	(14)	14
Exercise of stock options	79	19	373	---	---	---
Balance March 31, 1996	9,939	2,484	53,468	2,056	(321)	(154)
Net loss	---	---	---	(15,572)	---	---
Employee Stock Purchase Plan	15	4	104	---	---	---
Amortization of unearned compensation restricted stock	---	---	---	---	---	35
Issuance 100,580 treasury shares to 401(k)	---	---	702	---	129	---
Repurchase 12,667 shares of restricted stock	---	---	(53)	---	(3)	45
Exercise of stock options	172	43	419	---	---	---
Balance March 30, 1997	10,126	$ 2,531	$ 54,640	$ (13,516)	$ (195)	$ (74)

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

Alpha Industries, Inc. and Subsidiaries

Quarterly Financial Data
(unaudited)
(In thousands except share data)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Fiscal 1997					
Sales	$ 20,066	$ 20,137	$ 22,287	$ 22,763	$ 85,253
Gross profit	3,792	2,819	5,241	4,882	16,734
Net income (loss)	(3,424)	(4,728)	(2,075)	(5,345)	(15,572)
Per share data					
Net income (loss)	(.35)	(.48)	(.21)	(.54)	(1.58)
Market price range:					
High	11 3/4	9 3/8	9 3/4	9	11 3/4
Low	7 7/8	6 7/8	5 3/4	5 7/8	5 3/4
Fiscal 1996					
Sales	$ 22,434	$ 23,733	$ 25,237	$ 25,490	$ 96,894
Gross profit	7,382	7,897	8,553	7,076	30,908
Net income	1,114	1,081	1,437	162	3,794
Per share data					
Net income(1)	.14	.13	.16	.02	.43
Market price range:					
High	15-1/4	19-5/8	17-7/8	13-7/8	19-5/8
Low	10-5/8	14-1/8	10-1/2	7	7

The Company's common stock is traded on the American Stock Exchange, symbol AHA.
The number of stockholders of record as of May 30, 1997 was approximately 1,100.

(1) Earnings per share calculations for each of the quarters are based on the weighted average number of shares outstanding and included common stock equivalents in each period. Therefore, the sum of the quarters does not necessarily equal the full year earnings per share.

Notes To Consolidated Financial Statements

Note 1 Summary of Significant Accounting Policies

Principles of Consolidation:
The financial statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The Company's fiscal year ends on the Sunday closest to March 31. There were 52 weeks in fiscal 1997, 1996 and 1995.

Use of Estimates:
The preparation of consolidated 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. Actual results could differ from those estimates.

Revenue Recognition:
Revenue is recognized when a product is shipped and services are performed. Contract revenue is recognized on the percentage-of-completion method, which is primarily measured on the ratio of units shipped to the total contract number of units. Provisions for estimated losses, if any, on uncompleted contracts are made in the period in which such losses are determined.

Foreign Currency Translation:
The accounts of foreign subsidiaries are translated in accordance with the Financial Accounting Standards Board Statement No. 52. Foreign operations are remeasured as if the functional currency were the U.S. dollar. Monetary assets and liabilities are translated at the year end rates of exchange. Revenues and expenses (except cost of sales and depreciation) are translated at the average rate for the period. Non-monetary assets, equity, cost of sales and depreciation are remeasured at historical rates. Remeasurement gains and losses are reflected currently in operations and are not material.

Research and Development Expenditures:
Research and development expenditures are charged to income as incurred unless they are reimbursed under specific contracts.

Cash, Cash Equivalents and Short-term Investments:
Cash and cash equivalents include cash deposited in demand deposits at banks and highly liquid investments with original maturities of 90 days or less.

During fiscal year 1996, the Company adopted Statement of Financial Accounting Standard No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Accordingly, the Company's short-term investments are classified as held-to-maturity. These investments consist primarily of commercial paper and bonds with original maturities of more than 90 days. Such short-term investments are carried at amortized cost, which approximates fair value, due to the short period of time to maturity. Gains and losses are included in investment income in the period they are realized.

Inventories:
Inventories are stated at the lower of cost, determined on a first-in, first-out basis, or market.

Notes To Consolidated Financial Statements (continued)

Note 1 Summary of Significant Accounting Policies (continued)

Property, Plant and Equipment:
Property, plant and equipment are carried at cost. Depreciation is provided on the straight-line method for financial reporting and accelerated methods for tax purposes.

Estimated useful lives used for depreciation purposes are 5 to 30 years for buildings and improvements and 3 to 10 years for machinery and equipment.

During fiscal 1996, the Company removed $7.7 million of fully depreciated fixed assets from the related property and accumulated depreciation accounts.

Fair Value of Financial Instruments:
Financial instruments of the Company consist of cash, cash equivalents, accounts receivable, accounts payable and accrued liabilities. The carrying value of these financial instruments approximates their fair value because of the short maturity of these instruments. Based upon borrowing rates currently available to the Company for issuance of similar debt with similar terms and remaining maturities, the estimated fair value of long-term debt approximates their carrying amounts. The Company does not use derivative instruments.

Income Taxes:
The Company uses the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits such as net operating loss carryforwards, to the extent that realization of such benefits is more likely than not. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Net Income Per Share:
In fiscal 1997, 1996, and 1995, the computation of both primary and fully diluted earnings per share was based on the weighted average number of outstanding common shares. Fiscal 1997 does not include common stock equivalents since the effect would have been antidilutive. In fiscal 1996 and 1995 the computation was based on the weighted average shares of common stock outstanding plus common equivalent shares arising from the effect of dilutive stock options and warrants, using the treasury stock method. The weighted average number of shares of common stock and common equivalent shares outstanding, if applicable, for the calculation of primary earnings per share was 9,848,000 in fiscal 1997, 8,755,000 in fiscal 1996, and 7,882,000 in fiscal 1995.

Notes To Consolidated Financial Statements (continued)

Note 1 Summary of Significant Accounting Policies (continued)

New Accounting Standards:

During fiscal 1997, the Company adopted Financial Accounting Standards Board Statements No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" and No. 123, "Accounting for Stock-Based Compensation" (FAS 123). The adoption of these standards had no material impact on the financial position or the results of operations of the Company in fiscal 1997. Under FAS 123, the Company has elected not to adopt the new accounting method and will continue to account for its stock-based compensation under the existing provisions of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" (APB 25) and related interpretations. Accordingly, the Company has provided pro-forma disclosures of net earnings and earnings per share assuming FAS 123 had been adopted. (See Note 7 for the additional disclosures required by FAS 123.)

Note 2 Company Operations

The Company operates in one industry segment: the development, production and sale of microwave materials, devices and components. Sales include export sales primarily to Europe and to a lesser extent Southeast Asia of $26,720,000, $23,633,000, and $16,855,000, in fiscal 1997, 1996, and 1995, respectively.

During fiscal year 1997, one customer accounted for 11% of the Company's total sales whereas, during fiscal years 1996 and 1995, no one customer accounted for 10% or more of the Company's total sales. The Company is focused on four major OEMs and six other customers that the Company believes are principal suppliers to these OEMs in the wireless communications market. For fiscal 1997 sales to the four major OEMs and their suppliers represented approximately 26% of the Company's sales. In fiscal 1995 and 1994 sales to these OEMs and their suppliers represented approximately 29% and 17% of the Company's sales, respectively. While the Company believes that these emerging wireless markets afford great opportunities, such customer concentration could have an adverse affect on the business.

Notes To Consolidated Financial Statements (continued)

Note 2 Company Operations (continued)

During fiscal 1997, the Company operated a sales subsidiary in the United Kingdom and a ceramic manufacturing operation in France. At the end of fiscal 1997, the Company sold its ceramic manufacturing operation in France. During fiscal 1996, the Company closed its sales subsidiary in Germany and replaced it with an independent sales representative and distributor. The following table shows certain financial information relating to the Company's operations in various geographic areas (in thousands):

	1997	1996	1995
Sales			
United States			
Customers	$ 76,004	$ 83,078	$ 67,495
Intercompany	6,472	8,526	6,665
Europe			
Customers	9,249	13,816	10,759
Eliminations	(6,472)	(8,526)	(6,665)
Net Sales	85,253	96,894	78,254
Income (loss) before taxes			
United States	(13,520)	3,553	2,723
Europe	(2,052)	910	626
Income (loss) before taxes	(15,572)	4,463	3,349
Assets			
United States	61,547	69,201	44,896
Europe	3,706	6,222	5,271
Total Assets	$ 65,253	$ 75,423	$ 50,167

Transfers between geographic areas are made at terms that allow for a reasonable profit to the seller.

Note 3 Inventories

Inventories consisted of the following (in thousands):	March 30, 1997	March 31, 1996
Raw materials	$ 4,886	$ 4,878
Work-in-process	3,439	5,830
Finished goods	1,942	1,307
	$ 10,267	$ 12,015

During fiscal 1997, the Company recorded a $2.6 million write-down of inventory resulting from shifts in demand away from ceramic products.

Notes To Consolidated Financial Statements (continued)

Note 4 Borrowing Arrangements and Commitments

Line Of Credit

The Company has a $7.5 million Working Capital Line of Credit Agreement which expires in October 1997. This line of credit is collateralized by the assets of the Company, excluding real property, not otherwise collateralized. A commitment fee of 1/2% per year is due quarterly under the Agreement. At March 30, 1997, there was $1.0 million outstanding under the Agreement. At March 31, 1996, there was no outstanding balance under this Agreement.

Long-Term Debt

Long-term debt consisted of the following (in thousands):	March 30, 1997	March 31, 1996
Equipment Term Note (a)	$ 3,998	$ 1,011
9-1/2% Mortgage Note Payable (b)	---	40
Industrial Revenue Bond (c)	558	667
French Government Sponsored and Start-up Loans (d)	170	251
CDBG Grant (e)	819	928
	5,545	2,897
Less - current maturities	1,939	332
	$ 3,606	$ 2,565

a. The equipment term note is at LIBOR (5.4375% at March 30, 1997 and March 31, 1996) plus 3% and 2%, respectively. This note is collateralized by the assets of the Company, excluding real property, not otherwise collateralized. Principal payments of $137,871 plus interest are due monthly until August 1999.

b. The mortgage note payable was paid in full during fiscal 1997.

c. An industrial revenue bond is held by the Farmers and Mechanics National Bank. The interest rate on this bond is prime (8.5% at March 30, 1997) and quarterly principal payments of $27,777 are due until March 2002. The bond is secured by various property, plant and equipment with a net book value of $2,697,000 at March 30, 1997.

d. The Company has three unsecured government sponsored and start-up business loans. The first loan has an interest rate of 8.75% and requires annual payments of $36,000 through December 1998. The second loan has an interest rate of 5% and requires quarterly principal and interest payments of $8,300 through February 2000. The third loan has an interest rate of 9.0% and requires principal and interest payments of $3,500 through January 1998.

e. The Company obtained a ten year $960,000 loan from the State of Maryland under the Community Development Block Grant program. Quarterly payments are due through December 2003 and represent principal plus interest at 5% of the unamortized balance.

Notes To Consolidated Financial Statements (continued)

Note 4 Borrowing Arrangements and Commitments (continued)

Aggregate annual maturities of long-term debt are as follows (in thousands):

Fiscal Year	
1999	$ 1,950
2000	944
2001	234
2002	240
Thereafter	238
	$ 3,606

Capital Lease Obligations

At March 30, 1997 included in property, plant and equipment are the following capitalized leases (in thousands):

Property, plant and equipment	$ 1,798
Accumulated depreciation and amortization	1,433
	$ 365

Future minimum lease payments under the capitalized lease obligations at March 30, 1997 were as follows (in thousands):

Fiscal Year	
1998	$ 236
1999	9
Total minimum lease payments	245
Less: Amount representing interest	7
Present value of net minimum lease payments	238
Less: Current maturities	230
Long-term maturities	$ 8

Cash payments for interest were $470,000, $906,000, and $635,000 in fiscal 1997, 1996, and 1995, respectively.

The bond, line of credit and term loan agreements include various covenants that require maintenance of certain financial ratios and balances and restrict creation of funded debt and payment of dividends. Under the most restrictive covenants the Company may not pay dividends except restricted payments in an amount not to exceed $100,000 in connection with the redemption of certain common stock repurchase rights.

Notes To Consolidated Financial Statements (continued)

Note 5 Repositioning Charge

During fiscal 1997, the Company successfully completed the resizing of Trans-Tech, Inc.(TTI), its Maryland subsidiary, which included the sale of Trans-Tech Europe (TTE), its French ceramic manufacturing operation, and the closing of the TTI California facility. The Company also completed the sale of the digital radio product line. The above actions resulted in a repositioning charge which was recorded in the fourth quarter of fiscal 1997. The charge included the following items (in thousands):

Employee severance at TTI.....	$ 493
Lease commitments on unoccupied facilities at TTI.....	512
Write-off of excess equipment at TTI..	263
Net loss on divestitures.....	806
Total repositioning charge.....	$2,074

The severance charges were related to a reduction in force of 47 employees, largely among support personnel, and were completed in the fourth quarter of fiscal 1997.

The cash payments relating to the repositioning charge will total approximately $1.4 million. As of March 31, 1997, cash payments totaling $308 thousand were made. Approximately $971 thousand is expected to be paid in fiscal 1998 with the remaining balance to be paid in fiscal 1999.

During fiscal 1996, the Company sold its Methuen, Massachusetts plant which resulted in a $320 thousand repositioning credit attributable to the reversal of certain accruals as a result of an earlier than expected disposition of this facility.

Note 6 Income Taxes

Income (loss) before income taxes consisted of (in thousands):

	1997	1996	1995
Domestic.....	$(13,520)	$3,553	$2,723
Foreign.....	(2,052)	910	626
	$(15,572)	$4,463	$3,349

The provision for income taxes consisted of (in thousands):

	1997	1996	1995
Current income taxes			
Federal.....	$ ---	$ 69	$ 75
State.....	(119)	108	217
Foreign.....	119	492	210
	$ ---	$ 669	$ 502

Notes To Consolidated Financial Statements (continued)

Note 6 Income Taxes (continued)

The provision for income taxes is different from that which would be obtained by applying the statutory Federal income tax rate to income (loss) before income taxes. The items causing this difference are as follows (in thousands):

	1997	1996	1995
Tax expense (benefit) at U.S. statutory rate..	$(5,294)	$1,517	$1,139
State income taxes, net of Federal benefit....	79	71	143
Change in valuation allowance.....	5,189	(882)	(763)
Other net.....	26	(37)	(17)
	$ ---	$ 669	$ 502

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at March 30, 1997 and March 31, 1996 are as follows (in thousands):

	1997	1996
Deferred tax assets:		
Accounts receivable due to bad debts.....	$ 195	$ 234
Inventories due to reserves and inventory capitalization..	1,417	729
Accrued liabilities.....	1,584	575
Deferred compensation.....	102	177
Other.....	7	6
Net operating loss carryforward.....	13,109	9,275
Charitable contribution carryforward.....	37	32
Minimum tax credits and state tax credit carryforwards....	555	415
Total gross deferred tax assets.....	17,006	11,443
Less valuation allowance.....	(13,503)	(8,314)
Net deferred tax assets.....	3,503	3,129
Deferred tax liabilities:		
Property, plant and equipment due to depreciation.....	(3,503)	(3,129)
Total gross deferred tax liability.....	(3,503)	(3,129)
Net deferred tax.....	$ ---	$ ---

The valuation allowance for deferred tax assets as of March 30, 1997 and March 31, 1996 was $13,503,000 and $8,314,000, respectively. The net change in the total valuation allowance for the years ended March 30, 1997 and March 31, 1996 was an increase of $5,189,000 and a decrease of $882,000, respectively.

Cash payments for income taxes were $149,000, $241,000 and $157,000 in fiscal 1997, 1996 and 1995, respectively. As of March 30, 1997, the Company has available for income tax purposes approximately $36,000,000 in federal net operating loss carryforwards which may be used to offset future taxable income. These loss carryforwards begin to expire in fiscal year 2004. Should the Company undergo an ownership change as defined in Section 382 of the Internal Revenue Code, the Company's tax net operating loss carryforwards generated prior to the ownership change will be subject to an annual limitation which could reduce or defer the utilization of these losses. The Company also has minimum tax credit carryforwards of approximately $25,000 which are available to reduce future federal regular income taxes, if any, over an indefinite period. In addition, the Company has state tax credit carryforwards of $530,000 of which $218,000 is available to reduce state income taxes over an indefinite period.

Notes To Consolidated Financial Statements (continued)

Note 6 Income Taxes (continued)

The Company has not recognized a deferred tax liability of approximately $148,000 for the undistributed earnings of its 100 percent owned foreign subsidiaries that arose in 1997 and prior years because the Company currently does not expect those unremitted earnings to reverse and become taxable to the Company in the foreseeable future. A deferred tax liability will be recognized when the Company expects that it will recover those undistributed earnings in a taxable manner, such as through receipt of dividends or sale of the investments. As of March 30, 1997, the undistributed earnings of these subsidiaries were approximately $436,000.

Note 7 Common Stock

Long-Term Incentive Plan

The Company has a Long-Term Incentive Plan adopted in 1986 pursuant to which stock options, with or without stock appreciation rights, may be granted and restricted stock awards and book value awards may be made.

Common Stock Options
These options may be granted in the form of incentive stock options or non-qualified stock options. The option price may vary at the discretion of the Compensation Committee but shall not be less than the greater of fair market value or par value. The option term may not exceed ten years. The options may be exercised in cumulative annual increments commencing one year after the date of grant.

Restricted Stock Awards
No restricted shares of the Company's common stock were issued during fiscal 1997. For fiscal 1996 and 1995, respectively, a total of 8,500 and 31,000 restricted shares of the Company's common stock were granted to certain employees.

The market value of shares awarded were $51,000 and $147,000 for fiscal 1996 and 1995, respectively. These amounts were recorded as unearned compensation - restricted stock and are shown as a separate component of stockholders' equity. Unearned compensation is being amortized to expense over the five year vesting period and amounted to $35,000, $61,000, and $64,000 in fiscal 1997, 1996, and 1995, respectively.

Long-Term Compensation Plan

On October 1, 1990, the Company adopted a Supplemental Executive Retirement Plan (SERP) for certain key executives. Benefits payable under this plan are based upon the participant's base pay at retirement reduced by proceeds from the exercise of certain stock options. Options vest over a five year period. Benefits earned under the SERP are fully vested at age 55, however, the benefit is ratably reduced if the participant retires prior to age 65. Compensation expense related to the plan was $106,000, $62,000 and $68,000 in fiscal 1997, 1996, and 1995, respectively. Total benefits accrued under these plans were $180,000 at March 30, 1997 and $515,000 at March 31, 1996.

Notes To Consolidated Financial Statements (continued)

Note 7 Common Stock (continued)

A summary of stock option and restricted stock award transactions follows:

	Shares	Weighted average exercise price of shares under plan
Balance, April 3, 1994	970,564	$2.73
Granted	87,000	8.31
Exercised	(147,255)	2.66
Restricted	(19,335)	---
Cancelled	(21,749)	4.44
Balance outstanding at April 2, 1995	869,225	3.14
Granted	115,500	12.36
Exercised	(78,432)	2.82
Restricted	(22,664)	---
Cancelled	(44,242)	6.06
Balance outstanding at March 31, 1996	839,387	4.38
Granted	598,500	8.36
Exercised	(172,750)	2.73
Restricted	(23,164)	---
Cancelled	(186,503)	8.61
Balance outstanding at March 30, 1997	1,055,470	6.21
Balance exercisable at March 30, 1997	422,936	$3.25

The following table summarizes information concerning currently outstanding and exercisable options as of March 30, 1997:

Range of exercise prices	Number outstanding	Weighted average remaining contractual life (years)	Weighted average outstanding option price	Options exercisable	Weighted average exercise price
$2.375 - $5.00	432,868	4.4	$2.68	391,336	$2.62
$5.01 - $10.00	499,000	9.3	$8.15	9,200	$8.87
$10.01 - $13.00	94,600	8.1	$12.09	22,400	$11.90
Restricted	29,002	4.5	---	---	---
	1,055,470			422,936	

Notes To Consolidated Financial Statements (continued)

Note 7 Common Stock (continued)

The Company applies Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" and related interpretations in accounting for its stock option and employee stock purchase plans, accordingly, no compensation expense has been recognized in the consolidated financial statements for such plans. The following assumptions were used in the calculation of these values for fiscal years 1997 and 1996, respectively: volatility of 85%, risk free interest rate of 7% and expected life of 9.95 years. Had compensation cost for the Company's stock option plans been determined based upon the fair value at the grant date for awards under these plans consistent with the methodology prescribed under SFAS 123, "Accounting for Stock-based Compensation," the Company's net income would have been reduced to the pro forma amounts indicated below:

(in thousands)		1997	1996
Net income (loss)	As reported	$ (15,572)	$ 3,794
	Pro forma	(15,711)	3,445

The effect of applying SFAS 123 as shown in the above pro forma disclosure is not representative of the pro forma effect on net income in future years because it does not take into consideration proforma compensation expense related to grants made prior to fiscal year 1996.

Stock Purchase Warrants

In April 1994, the Company amended its line of credit agreement and issued 50,000 stock purchase warrants to Silicon Valley Bank. The warrants are exercisable at $3.75 per share and expire on April 1, 1999.

Stock Option Plan For Non-Employee Directors

On September 12, 1994, the shareholders approved a Non-Qualified Stock Option Plan for Non-Employee Directors. A total of 50,000 options may be granted under this plan. The option price is the greater of the fair market value of the shares of common stock at the time the option is granted or four dollars ($4.00). Options are exercisable 20% per year. No options were granted under this plan during fiscal 1997. During fiscal 1996, a new director was elected to the Board of Directors and 5,000 non-qualified stock options were issued at $17.875 per share. In fiscal 1995, each of the three directors received 5,000 non-qualified stock options issued at $5.875 per share. No options have been exercised under this plan.

Stock Purchase Plan

In December 1989, the Company adopted an employee stock purchase plan. The plan was amended in October 1992 to provide for six month offering periods. Under the plan, eligible employees may purchase common stock through payroll deductions of up to 10% of compensation. The price per share is the lower of 85% of the market price at the beginning or end of the offering period. The plan originally provided for purchases by employees of up to an aggregate of 300,000 shares through December 31, 1995. During fiscal 1996, the employee stock purchase plan was amended and extended through December 31, 1998. Shares of 15,076, 16,836, and 28,875, were purchased under this plan in fiscal 1997, 1996, and 1995, respectively.

Notes To Consolidated Financial Statements (continued)

Note 7 Common Stock (continued)

Shareholder Rights Plan

In December 1996, the Board of Directors of the Company declared a dividend distribution of one right for each outstanding share of common stock. Each right entitles the registered holder to purchase from the Company one common share at an exercise price of $40 per share. A right will also be issued with each common share that is issued prior to the time the rights become exercisable or expire.

The rights are not exercisable until after a person or group acquires 10% or more of the Company's common stock or announces a tender offer for 10% or more of the common stock except with respect to persons who already hold 10% in which case the threshold is any additional shares. In such events, each holder shall be entitled to purchase that number of shares of the Company's common stock having a market value equal to two times the $40 per share exercise price. In lieu of such right, the Board of Directors may issue one share of common stock for each right held by everyone except the acquiring person or group. In the event that the Company is acquired in a merger or other business combination transaction or more than 50% of its assets or earning power are sold, each holder shall thereafter have the right to receive, upon exercise of each right, that number of shares of common stock of the acquiring company which at the time of such transaction would have a market value of two times the $40 per share exercise price.

The Company is entitled to redeem the rights at one cent per share at any time before the rights are exercisable. The rights will expire on December 5, 2006, unless extended or unless the rights are earlier redeemed or exchanged; provided, however, that the Shareholder Rights Plan will terminate at the annual meeting of stockholders of the Company to be held on September 8, 1997, if the stockholders do not approve the Plan at that meeting.

Note 8 Employment Benefit Plan

On March 31, 1995, the Company merged its Employee Stock Ownership Plan into the Alpha Industries, Inc. Saving and Retirement Plan also known as the 401(k) plan. All of the Company's employees who are at least 21 years old and have completed six months of service (1,000 hours in a 12 month period) with the Company are eligible to receive a Company contribution. Discretionary Company contributions are determined by the Board of Directors and may be in the form of cash or the Company's stock. The Company contributes a match of 100% of the first 1% and a 50% match on the next 4% of an employee's salary for employees with 5 years or less of service. For employees with more than 5 years of service the Company contributes a 100% match on the first 1% and a 75% match on the next 5% of an employee's salary. For fiscal 1997, the Company contributed 110,956 shares of the Company's common stock valued at $835,000 to the 401(k) plan. During fiscal 1996, the Company contributed $101,000 for the first three quarters and accrued $208,000 that was distributed in the form of the Company's stock in fiscal 1997.

Under the previous 401(k) plan all of the Company's employees who were at least 21 years old and had completed one year of service (1,000 hours in a 12 month period) with the Company were eligible to receive a Company matching contribution. The Company contributed $.50 for each $1.00 contributed by employees, up to a maximum Company matching contribution of $500 per employee for fiscal 1995. For fiscal year 1995, the Company contributed $232,000.

Under the previous Employee Stock Ownership Plan contributions were determined by the Board of Directors and contributed to a trust created to acquire shares of the Company's common stock and other assets for the exclusive benefit of the participants. The Company accrued a contribution of $226,000 for fiscal 1995 that was distributed during fiscal 1996.

Notes To Consolidated Financial Statements (continued)

Note 9 Commitments And Contingencies

The Company has various operating leases for manufacturing and engineering equipment and buildings. Rent expense amounted to $1,937,000, $1,626,000, and $1,255,000 in fiscal 1997, 1996, and 1995, respectively. Purchase options may be exercised at various times for some of these leases. Future minimum payments under these leases are as follows (in thousands):

Fiscal Year	
1998	$ 1,321
1999	660
2000	370
2001	374
2002	388
Thereafter	1,527
	$ 4,640

The Company has been notified by federal and state environmental agencies of its potential liability with respect to the Spectron, Inc. Superfund site in Elkton, Maryland. Several hundred other companies have also been notified about their potential liability regarding this site. The Company continues to deny that it has any responsibility with respect to this site other than as a de minimis party. Management is of the opinion that the outcome of the aforementioned environmental matter will not have a material effect on the Company's operations or financial position.

The Company is party to suits and claims arising in the normal course of business. Management believes these are adequately provided for or will result in no significant additional liability to the Company.

Note 10 Related Party Transactions

The Company has had transactions in the normal course of business with various related parties. Scientific Components Corporation, currently a beneficial owner of the Company's Common Stock purchased approximately $5.1 million, $4.3 million, and $1.9 million of products during fiscal 1997, 1996, and 1995, respectively. In addition, a director of the Company is also a director of Scientific Atlanta, Inc. During fiscal 1997, 1996, and 1995, Scientific Atlanta, Inc. purchased approximately $1 million, $1.2 million, and $766 thousand of product, respectively.

Independent Auditors' Report

The Board of Directors and Stockholders
Alpha Industries, Inc.:

We have audited the consolidated financial statements of Alpha Industries, Inc. and subsidiaries as listed in the accompanying index under Item 8. In connection with our audits of the consolidated financial statements, we have also audited the financial statement schedule as listed in the accompanying index under Item 14. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Alpha Industries, Inc. and subsidiaries at March 30, 1997 and March 31, 1996, and the results of their operations and their cash flows for each of the years in the three-year period ended March 30, 1997 in conformity with generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

KPMG Peat Marwick LLP

Boston, Massachusetts
May 9, 1997

Item 9 Changes In And Disagreements With Accountants On Accounting And Financial Disclosure

None.

PART III

Item 10 Directors And Executive Officers Of The Registrant

See the section entitled "Election of Directors" appearing in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on September 8, 1997, to be filed within 120 days of the end of the Company's fiscal year, which section is incorporated herein by reference, and the section entitled "Executive Officers" under Item 1 of this Annual Report on Form 10-K.

Item 11 Executive Compensation

See the section entitled "Executive Compensation" appearing in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on September 8, 1997, which section is incorporated herein by reference.

Item 12 Security Ownership Of Certain Beneficial Owners And Management

See the section entitled "Securities Beneficially Owned by Certain Persons" appearing in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on September 8, 1997, which section is incorporated herein by reference.

Item 13 Certain Relationships And Related Transactions

See the section entitled "Certain Relationships and Related Transactions" appearing in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on September 8, 1997, which section is incorporated herein by reference.

PART IV

Item 14 Exhibits, Financial Statement Schedules, And Reports On Form 8-K

(a) 1. Index to Financial Statements

The financial statements filed as part of this report are listed on the index appearing on page 17.

2. Index to Financial Statement Schedules

The following financial statement schedule is filed as part of this report (page references are to this report):

Schedule II Valuation and Qualifying Accounts (page 41)

Other schedules are omitted because of the absence of conditions under which they are required or because the required information is presented in the financial statements or notes thereto.

3. Exhibits

(3) Certificate of Incorporation and By-laws.

(a) Restated Certificate of Incorporation (Filed as Exhibit 3 (a) to Registration Statement on Form S-3 (Registration No. 33-63857))*.

(b) Amended and restated By-laws of the Corporation dated April 30, 1992 (Filed as Exhibit 3(b) to the Annual Report on Form 10-K for the year ended March 29, 1992)*.

(4) Instruments defining rights of security holders, including indentures.

(a) Specimen Certificate of Common Stock (Filed as Exhibit 4(a) to Registration Statement on Form S-3 (Registration No. 33-63857))*.

(b) Frederick County Industrial Development Revenue Bond, Deed of Trust, Loan Agreement and Guaranty and Indemnification Agreement dated June 17, 1982 (Filed as Exhibit 4(g) to the Registration Statement on Form S-8 filed July 29, 1982)*. Bond and Loan Document Modification Agreement dated December 9, 1993 (Filed as Exhibit 4(c) to the Quarterly Report on Form 10-Q for the quarter ended December 26, 1993)*.

(c) Amended and restated Shareholder Rights Agreement dated as of December 5, 1996 between Registrant and American Stock Transfer and Trust Company, as Rights Agent as amended and restated June 23, 1997.

(d) Loan and Security Agreement dated December 15, 1993 between Trans-Tech, Inc., and County Commissioners of Frederick County (Filed as Exhibit 4(h) to the Quarterly Report on Form 10-Q for the quarter ended July 3, 1994)*.

(e) Stock Purchase Warrant for 50,000 shares of the Registrant's Common Stock issued to Silicon Valley Bank as of April 1, 1994 (Filed as Exhibit 4(i) to the Quarterly Report on Form 10-Q for the quarter ended July 3, 1994)*.

(f) Credit Agreement dated September 29, 1995 between Alpha Industries, Inc., and Trans-Tech Inc. and Fleet Bank of Massachusetts, N.A. and Silicon Valley Bank. (Filed as Exhibit 4(j) to the Quarterly Report on Form 10-Q for the quarter ended October 1, 1995)*; and as amended by Second Amendment dated as of September 30, 1996, and as further amended by Third Amendment dated as of June 12, 1997 and amended and restated promissory notes dated as of June 12, 1997.

(10) Material Contracts.

(a) Alpha Industries, Inc., 1986 Long-Term Incentive Plan as amended (Filed as Exhibit 10(a) to the Quarterly Report on Form 10-Q for the quarter ended October 2, 1994)*. (1)

(b) Alpha Industries, Inc., Employee Stock Purchase Plan as amended October 22, 1992 (Filed as Exhibit 10(b) to the Annual Report on Form 10-K for the fiscal year ended March 28, 1993)* and amended August 22, 1995. (Filed as Exhibit 10(b) to the Annual Report on Form 10-K for the fiscal year ended March 31, 1996)*. (1)

(c) SERP Trust Agreement between the Registrant and the First National Bank of Boston as Trustee dated April 8, 1991 (Filed as Exhibit 10(c) to the Annual Report on Form 10-K for the fiscal year ended March 31, 1991)*. (1)

(d) Alpha Industries, Inc., Long-Term Compensation Plan dated September 24, 1990 (Filed as Exhibit 10(i) to the Annual Report on Form 10-K for the fiscal year ended March 29, 1992)*; amended March 28, 1991 (Filed as Exhibit 10 (a) to the Quarterly Report on Form 10-Q for the quarter ended June 27, 1993)* and as further amended October 27, 1994 (Filed as Exhibit 10(f) to the Annual Report on Form 10-K for the fiscal year ended April 2, 1995)*. (1)

(e) Master Equipment Lease Agreement between AT&T Commercial Finance Corporation and the Registrant dated June 19, 1992 (Filed as Exhibit 10(j) to the Annual Report on Form 10-K for the fiscal year ended March 28, 1993)*.

(f) Severance Agreement dated January 13, 1997 between the Registrant and Thomas C. Leonard.(1)

(g) Severance Agreement dated May 20, 1997 between the Registrant and David J. Aldrich. (1)

(h) Severance Agreement dated January 14, 1997 between the Registrant and Richard Langman. (1)

(i) Employment Agreement dated October 4, 1996 between the Registrant and Martin J. Reid.(1)

(j) Consulting Agreement dated August 13, 1992 between the Registrant and Sidney Topol. (Filed as Exhibit 10(p) to the Annual Report on Form 10-K for the fiscal year ended April 3, 1994)*.(1)

(k) Master Lease Agreement between Comdisco, Inc. and the Registrant dated September 16, 1994 (Filed as Exhibit 10(q) the Quarterly Report on Form 10-Q for the quarter ended October 2, 1994)*.

(l) Alpha Industries, Inc., 1994 Non-Qualified Stock Option Plan for Non-Employee Directors (Filed as Exhibit 10(r) to the Quarterly Report on Form 10-Q for the quarter ended October 2, 1994)*. (1)

(m) Alpha Industries Executive Compensation Plan dated January 1, 1995 and Trust for the Alpha Industries Executive Compensation Plan dated January 3, 1995 (Filed as Exhibit 10(p) to the Annual Report on Form 10-K for the fiscal year ended April 2, 1995)*.(1)

(n) Alpha Industries, Inc. Savings and Retirement 401(k) Plan dated July 1, 1996.

(o) Change in Control Agreement between the Registrant and Paul E. Vincent dated August 23, 1996.(1)

(p) Change in Control Agreement between the Registrant and James C. Nemiah dated August 23, 1996.(1)

(q) Severance Agreement dated April 30, 1996 between the Registrant and Jean Pierre Gillard.(1)

(r) Lease Agreement between MIE Properties, Inc. and Trans-Tech, Inc. (Filed as Exhibit 10(r) to the Quarterly Report on Form 10-Q for the quarter ended September 29, 1996)*.

(11) Statement re computation of per share earnings.

(21) Subsidiaries of the Registrant.

(23) Consent of Independent Auditors.

(27) Financial Data Schedule.

(b) Reports on Form 8-K

No reports on Form 8-K were filed with the Securities and Exchange Commission during the fiscal quarter ended March 30, 1997.

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*Not filed herewith. In accordance with Rule 12b-32 promulgated pursuant to the Securities Exchange Act of 1934, as amended, reference is hereby made to documents previously filed with the Commission, which are incorporated by reference herein.

(1) Management Contracts.

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.

ALPHA INDUSTRIES, INC.
(Registrant)

By: /s/ THOMAS C. LEONARD
Thomas C. Leonard, President

Date: June 20, 1997

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on June 20, 1997.

Signature and Title	Signature and Title
/s/ GEORGE S. KARIOTIS	/s/ MARTIN J. REID
George S. Kariotis Chairman of the Board	Martin J. Reid Director
/s/ THOMAS C. LEONARD	/s/ RAYMOND SHAMIE
Thomas C. Leonard Chief Executive Officer President and Director	Raymond Shamie Director
/s/ PAUL E. VINCENT	/s/ SIDNEY TOPOL
Paul E. Vincent Chief Financial Officer Principal Financial Officer Principal Accounting Officer	Sidney Topol Director
/s/ ARTHUR PAPPAS	/s/ CHARLES A. ZRAKET
Arthur Pappas Director	Charles A. Zraket Director

SCHEDULE II

Valuation And Qualifying Accounts
(In thousands)

Description	Balance At Beginning Of Year	Charged To Costs And Expenses	Deductions	Balance At End Of Year
Year Ended March 30, 1997				
Allowance for doubtful accounts..	$ 634	$ 206	$ 319	$ 521
Allowance for estimated losses on contracts.....	$ 24	$ --	$ 21	$ 3
Year Ended March 31, 1996				
Allowance for doubtful accounts..	$ 783	$ 60	$ 209	$ 634
Allowance for estimated losses on contracts.....	$ 117	$ --	$ 93	$ 24
Year Ended April 2, 1995				
Allowance for doubtful accounts..	$ 945	$ 60	$ 222	$ 783
Allowance for estimated losses on contracts.....	$ 593	$ --	$ 476	$ 117

EXHIBIT (4)(c)

AMENDED AND RESTATED

SHAREHOLDER RIGHTS AGREEMENT

between

ALPHA INDUSTRIES, INC.

and

AMERICAN STOCK TRANSFER & TRUST COMPANY

Dated as of December 5, 1996

as Amended and Restated June 23, 1997

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SHAREHOLDER RIGHTS AGREEMENT

Agreement, dated as of December 5, 1996, as amended and restated as of June 23, 1997, between Alpha Industries, Inc., a Delaware corporation (the "Company"), and American Stock Transfer & Trust Company, a New York trust company (the "Rights Agent").

WITNESSETH

WHEREAS, the Board of Directors of the Company desires to provide shareholders of the Company with the opportunity to benefit from the long-term prospects and value of the Company and to ensure that shareholders of the Company receive fair and equal treatment in the event of any proposed takeover of the Company;

WHEREAS, the Company and the Rights Agent entered into the Agreement dated as of December 5, 1996;

WHEREAS, on December 5, 1996, the Board of Directors of the Company declared a dividend distribution of one Right (as hereafter defined) for each outstanding share of Common Stock, par value $.25 per share of the Company (the "Common Stock") outstanding as of the close of business on December 5, 1996 (the "Record Date"), and authorized the issuance of one Right for each share of Common Stock of the Company issued (whether originally issued or sold from the Company's treasury) between the Record Date and the earlier of the Distribution Date or the Expiration Date (as hereafter defined), each Right initially representing the right to purchase one share of Common Stock of the Company upon the terms and subject to the conditions hereinafter set forth (the "Rights");

WHEREAS, the Board of Directors of the Company has determined it to be in the best interest of the Company to amend in certain respects and restate the terms of the Agreement and of the Rights pursuant to Section 27 of the Agreement; and

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein set forth, the parties hereby agree to amend and restate the Agreement as follows:

Section 1. Certain Definitions. For purposes of this Agreement, the following terms have the indicated meanings:

"Acquiring Person" means any Person who or which, together with all Affiliates and Associates of such Person, shall be the Beneficial Owner of 10% or more of the shares of Common Stock then outstanding, but shall not include (i) any Person who is the Beneficial Owner of 10% or more of the shares of Common Stock outstanding on the date of this Agreement unless and until such time hereafter as such Person shall become the Beneficial Owner (other than by means of a stock dividend or stock split) of any additional shares of Common Stock, and (ii) any Exempt Persons.

Notwithstanding the foregoing, no Person shall become an "Acquiring Person" (i) as the result of an acquisition of Common Stock by the Company which, by reducing the number of shares outstanding, increases the proportionate number of shares beneficially owned by such Person to 10% or more of the shares of Common Stock then outstanding; provided, however, that if a Person shall become the Beneficial Owner of 10% or more of the shares of Common Stock of the Company then outstanding by reason of share purchases by the Company and shall, after such share purchases by the Company, become the Beneficial Owner of any additional shares (other than pursuant to a stock split, stock dividend or similar transaction) of Common Stock of the Company and immediately thereafter be the Beneficial Owner of 10% or more of the shares of Common Stock then outstanding, then such Person shall be deemed to be an "Acquiring Person," or (ii) if the Board of Directors of the Company determines that a Person who would otherwise be an "Acquiring Person" has become such inadvertently, and such Person divests as promptly as practicable a sufficient number of shares of Common Stock so that such Person would no longer be an "Acquiring Person," as defined pursuant to the foregoing provisions.

"Affiliate" and "Associate" have the respective meanings ascribed to such terms in Rule 12b-2 under the Exchange Act, as in effect on the date of this Agreement; provided, however, that no Person who is a director or officer of the Company shall be deemed an Affiliate or an Associate of any other director or officer of the Company solely as a result of his or her position as director or officer of the Company.

"Beneficial Owner" means a person who is deemed to "beneficially own," any securities:

(i) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, beneficially owns (as determined pursuant to Rule 13d-3 under the Exchange Act, as in effect on the date of this Agreement);

(ii) which such Person or any of such Person's Affiliates or Associates, directly or indirectly, has:

(A) the right to acquire (whether such right is exercisable immediately or only after the passage of time or upon the satisfaction of any conditions or both) pursuant to any agreement, arrangement or understanding (whether or not in writing) (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) or upon the exercise of conversion rights, exchange rights, rights (other than the Rights), warrants or options, or otherwise; provided, however, that a Person shall not be deemed the "Beneficial Owner" of (1) securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person's Affiliates or Associates until such tendered securities are accepted for purchase or exchange; (2) securities issuable upon exercise of these Rights at any time prior to the occurrence of a Triggering Event; or (3) securities issuable upon exercise of Rights from and after the

occurrence of a Triggering Event, which Rights were acquired by such Person or any of such Person's Affiliates or Associates prior to the Distribution Date or pursuant to Sections 3(a), 11 (i) or 22 hereof; or

(B) the right to vote pursuant to any agreement, arrangement or understanding (whether or not in writing); provided, however, that a Person shall not be deemed the "Beneficial Owner" of any security under this clause (B) if the agreement, arrangement or understanding to vote such security (1) arises solely from a revocable proxy given in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the rules of the Exchange Act and (2) is not also then reportable by such person on Schedule 13D under the Exchange Act (or any comparable or successor report); or

(C) the right to dispose of pursuant to any agreement, arrangement or understanding (whether or not in writing) (other than customary arrangements with and between underwriters and selling group members with respect to a bona fide public offering of securities); or

(iii) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person or any of such Person's Affiliates or Associates has any agreement, arrangement or understanding (whether or not in writing) (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) for the purpose of acquiring, holding, voting (except, pursuant to a revocable proxy as described in clause (B) hereof) or disposing of any securities of the Company;

provided, however, that (1) no Person engaged in business as an underwriter of securities shall be deemed the Beneficial Owner of any securities acquired through such Person's participation as an underwriter in good faith in a firm commitment underwriting until the expiration of 40 days after the date of such acquisition, and (2) no Person who is a director or an officer of the Company shall be deemed, as a result of his or her position as director or officer of the Company, the Beneficial Owner of any securities of the Company that are beneficially owned by any other director or officer of the Company.

"Business Day" means any day other than a Saturday, Sunday, or a day on which banking institutions in the Commonwealth of Massachusetts are authorized or obligated by law or executive order to close.

"Close of business" on any given date means 5:00 p.m., Boston, Massachusetts time, on such date; provided, however, that if such date is not a Business Day it shall mean 5:00 P.M., Boston, Massachusetts time, on the next succeeding Business Day.

"Common Stock" means the Common Stock, par value $.25 per share, of the Company, except that "Common Stock" when used with reference to any Person other than the Company shall mean the capital stock with the greatest voting power, or the equity securities

or other equity interests having power to control or direct the management, of such Person or, if such Person is a Subsidiary of another Person, the Person which ultimately controls such first-mentioned Person and which has issued and outstanding such capital stock, equity securities or equity interests.

"Distribution Date" has the meaning defined in Section 3(a) hereof."

"Exchange Act" means the Securities Exchange Act of 1934, as amended."

"Exempt Person" means (i) the Company, (ii) any Subsidiary of the Company, (iii) any employee benefit plan or compensation arrangement of the Company or any Subsidiary of the Company, or (iv) any Person holding shares of Common Stock organized, appointed or established by the Company or any Subsidiary of the Company for or pursuant to the terms of any such employee benefit plan or compensation arrangement.

"Exercise Price" has the meaning defined in Section 7(b) hereof."

"Expiration Date" means the earlier of (i) the date of the next annual meeting of stockholders of the Company, unless at that meeting the stockholders of the Company approve the continuation of this Agreement by vote of not less than a majority of the stockholders present in person or by proxy at that meeting, (ii) the close of business on December 5, 2006 (the "Final Expiration Date"), (iii) the time at which the Rights are redeemed as provided in Section 23 hereof, or (iv) the time at which such Rights are exchanged as provided in Section 24 hereof."

"Exchange Ratio" has the meaning defined in Section 24.

"Fair Market Value" of any securities or other property shall be as determined in accordance with Section 11(d) hereof.

"Person" means an individual, a corporation, a partnership, an association, a joint stock company, a trust, a business trust, a government or political subdivision, any unincorporated organization, or any other association or entity.

"Principal Party" has the meaning defined in Section 13(b) hereof.

"Redemption Price" has the meaning defined in Section 23 hereof."

"Rights Certificate" means a certificate evidencing the Rights substantially in the form of Exhibit B hereto.

"Section 11 (a) (ii) Event" means any event described in Section 11(a)(ii) hereof.

"Section 13 Event" means any event described in clauses (x), (y) or (z) of Section 13(a) hereof."

"Securities Act" means the Securities Act of 1933, as amended.

"Stock Acquisition Date" means the date of the first public announcement (which for purposes of this definition shall include, without limitation, the issuance of a press release or the filing of a publicly-available report or other document with the Securities and Exchange Commission or any other governmental agency) by the Company or an Acquiring Person that an Acquiring Person has become such.

"Subsidiary" means with respect to any Person, any other Person of which a majority of the voting power of the voting equity securities or voting interests is owned, directly or indirectly, by such Person, or which is otherwise controlled by such Person."

"Trading Day" means a day on which the principal national securities exchange on which such security is listed or admitted to trading is open for the transaction of business or, if such security is not listed or admitted to trading on any national securities exchange, a Business Day.

"Triggering Event" means any Section 11(a)(ii) Event or any Section 13 Event.

Section 2. Appointment of Rights Agent.

The Company hereby appoints the Rights Agent to act as agent for the Company and the holders of the Rights (who, in accordance with Section 3 hereof, shall prior to the Distribution Date also be the holders of the Common Stock) in accordance with the terms and conditions hereof, and the Rights Agent hereby accepts such appointment. The Company may from time to time appoint such Co-Rights Agents as it may deem necessary or desirable. In the event the Company appoints one or more Co-Rights Agents, the respective duties of the Rights Agent and any Co-Rights Agents shall be as the Company shall determine.

Section 3. Issue of Right Certificates.

(a) From the date hereof until the earlier of (i) the close of business on the tenth Business Day after the Stock Acquisition Date, or (ii) the close of business on the tenth Business Day (or such other Business Day, if any, as the Board of Directors may determine in its sole discretion) after the date of the commencement by any Person, other than an Exempt Person, of a tender or exchange offer if, upon consummation thereof, such Person would be the beneficial Owner of 10% or more of the shares of Common Stock then outstanding, (the earliest of such dates being herein referred to as the "Distribution Date"), (x) the Rights will be evidenced (subject to the provisions of Section 3 (b) hereof) by the certificates for the Common Stock registered in the names of the holders of the Common Stock (which certificates for Common Stock shall be deemed also to be certificates for Rights) and not by separate certificates, and (y) the Rights will be transferable only in connection with the transfer of the

underlying shares of Common Stock. As soon as practicable after the Company has notified the Rights Agent of the occurrence of the Distribution Date, the Rights Agent will, at the Company's expense, send by first-class, insured, postage prepaid mail, to each record holder of the Common Stock as of the close of business on the Distribution Date, at the address of such holder shown on the records of the Company, one or more certificates, in substantially the form of Exhibit A hereto (the "Right Certificates"), evidencing one Right for each share of Common Stock so held. In the event that an adjustment in the number of Rights per share of Common Stock has been made pursuant to Section 11(o) hereof, the Company shall make the necessary and appropriate rounding adjustments (in accordance with Section 14(a) hereof) at the time of distribution of the Right Certificates, so that Right Certificates representing only whole numbers of Rights are distributed and cash is paid in lieu of any fractional Rights. As of and after the close of business on the Distribution Date, the Rights will be evidenced solely by such Right Certificates.

(b) With respect to certificates for the Common Stock issued prior to the close of business on the Record Date, the Rights will be evidenced by such certificates for the Common Stock on or until the Distribution Date (or the earlier redemption, expiration or termination of the Rights), and the registered holders of the Common Stock also shall be the registered holders of the associated Rights. Until the Distribution Date (or the earlier redemption, expiration or termination of the Rights), the transfer of any of the certificates for the Common Stock outstanding prior to the date of this Agreement shall also constitute the transfer of the Rights associated with the Common Stock represented by such certificate.

(c) Certificates for the Common Stock issued after the Record Date, but prior to the Distribution Date (or the earlier redemption, expiration or termination of the Rights), shall be deemed also to be certificates for Rights, and shall bear a legend, substantially in the form set forth below:

> This certificate also evidences and entitles the holder hereof to certain Rights as set forth in a Shareholder Rights Agreement between Alpha Industries, Inc. and American Stock Transfer & Trust Company as Rights Agent, dated as of December 5, 1996 (the "Rights Agreement"), the terms of which are hereby incorporated herein by reference and a copy of which is on file at the principal offices of Alpha Industries, Inc. Under certain circumstances, as set forth in the Rights Agreement, such Rights will be evidenced by separate certificates and will no longer be evidenced by this certificate. Alpha Industries, Inc. may redeem the Rights at a redemption price of $0.01 per Right, subject to adjustment, under the terms of the Rights Agreement. Alpha Industries, Inc. will mail to the holder of this certificate a copy of the Rights Agreement, as in effect on the date of mailing, without charge promptly after receipt of a written request therefor. Under certain circumstances, Rights issued to or held by Acquiring Persons or any Affiliates or Associates thereof (as defined in the Rights Agreement), and any subsequent holder of such Rights, may become null and void.

(d) The Rights associated with the Common Stock represented by certificates containing the legend in paragraph (c) above shall be evidenced by the Common Stock certificates alone until the Distribution Date (or the earlier redemption, expiration or termination of the Rights), and the transfer of any of such certificates shall also constitute the transfer of the Rights associated with the Common Stock represented by such certificates. In the event that the Company purchases or acquires any shares of Common Stock after the Record Date but prior to the Distribution Date, any Rights associated with such Common Stock shall be deemed canceled and retired so that the Company shall not be entitled to exercise any Rights associated with the Shares of Common Stock which are no longer outstanding. The failure to print the foregoing legend on any such Common Stock certificate or any defect therein shall not affect in any manner whatsoever the application or interpretation of the provisions of Section 7(e) hereof.

Section 4. Form of Right Certificates.

(a) The Right Certificates (and the forms of election to purchase shares and of assignment and certificate to be printed on the reverse thereof) shall each be substantially in the form of Exhibit A hereto and may have such marks of identification or designation and such legends, summaries or endorsements printed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any applicable law, rule or regulation or with any rule or regulation of any stock exchange on which the Rights may from time to time be listed, or to conform to customary usage. The Rights Certificates shall be in a machine printable format and in a form reasonably satisfactory to the Rights Agent. Subject to the provisions of Section 11 and Section 22 hereof, the Right Certificates, whenever distributed, shall be dated as of the Record Date, shall show the date of countersignature, and on their face shall entitle the holders thereof to purchase such number of shares of Common Stock as shall be set forth therein at the price set forth therein (the "Exercise Price"), but the number of such shares and the Exercise Price shall be subject to adjustment as provided herein.

(b) Any Right Certificate issued pursuant to Section 3(a) or Section 22 hereof that represents Rights beneficially owned by (i) an Acquiring Person, or any Associate or Affiliate of an Acquiring Person, (ii) a transferee of an Acquiring Person (or of any Associate or Affiliate of an Acquiring Person) who becomes a transferee after the Acquiring Person becomes such, or (iii) a transferee of an Acquiring Person (or of any Associate or Affiliate of the Acquiring Person) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such and receives such Rights pursuant to either (A) a transfer (whether or not for consideration) from the Acquiring Person to holders of equity interests in such Acquiring Person or to any Person with whom the Acquiring Person has any continuing agreement, arrangement or understanding (whether or not in writing) regarding the transferred Rights, or (B) a transfer which the Board of Directors of the Company has determined is part of a plan, arrangement or understanding which has as a primary purpose or effect the avoidance of Section 7(e) hereof, and any Right Certificate issued pursuant to Section 6, Section 11 or Section 22 upon transfer, exchange, replacement or adjustment of any other Right Certificate referred to in this sentence, shall have deleted therefrom the second sentence

of the existing legend on such Right Certificate and in substitution therefor shall contain the following legend:

> The Rights represented by this Right Certificate are or were beneficially owned by a Person who was or became an Acquiring Person, or an Affiliate or an Associate of an Acquiring Person (as such terms are defined in the Rights Agreement). This Right Certificate and the Rights represented hereby may become null and void under certain circumstances as specified in Section 7(e) of the Rights Agreement.

(c) The Company shall give notice to the Rights Agent promptly after it becomes aware of the existence and identity of any Acquiring Person or any Associate or Affiliate thereof. The Company shall instruct the Rights Agent in writing of the Rights which should be so legended. The failure to print the foregoing legend on any such Right Certificate or any defect therein shall not affect in any manner whatsoever the application or interpretation of the provisions of Section 7(e) hereof.

Section 5. Countersignature and Registration.

(a) The Right Certificates shall be executed on behalf of the Company by its Chairman of the Board, or its President or any Vice President and by its Treasurer or any Assistant Treasurer, or by its Secretary or any Assistant Secretary, either manually or by facsimile signature, and shall have affixed thereto the Company's seal or a facsimile thereof which shall be attested to by the Secretary or any Assistant Secretary of the Company, either manually or by facsimile signature. The Right Certificates shall be manually countersigned by an authorized signatory of the Rights Agent and shall not be valid for any purpose unless so countersigned. In case any officer of the Company who shall have signed any of the Right Certificates shall cease to be such officer of the Company before countersignature by the Rights Agent and issuance and delivery by the Company, such Right Certificates, nevertheless, may be countersigned by an authorized signatory of the Rights Agent, and issued and delivered by the Company with the same force and effect as though the person who signed such Right Certificates had not ceased to be such officer of the Company; and any Right Certificates may be signed on behalf of the Company by any person who, at the actual date of the execution of such Right Certificate, shall be a proper officer of the Company to sign such Right Certificate, although at the date of the execution of this Rights Agreement any such person was not such an officer.

(b) Following the Distribution Date, the Rights Agent will keep or cause to be kept, at one of its offices designated as the appropriate place for surrender of Right Certificates upon exercise or transfer, books for registration and transfer of the Right Certificates issued hereunder. Such books shall show the names and addresses of the respective holders of the Right Certificates, the number of Rights evidenced on its face by each of the Right Certificates and the date of each of the Right Certificates.

Section 6. Transfer, Split Up, Combination and Exchange of Right Certificates; Mutilated, Destroyed, Lost or Stolen Right Certificates.

(a) Subject to the provisions of Section 4(b), Section 7(e) and Section 14, at any time after the close of business on the Distribution Date, and at or prior to the close of business on the Expiration Date, any Right Certificate or Certificates may be transferred, split up, combined or exchanged for another Right Certificate or Certificates, entitling the registered holder to purchase a like number of shares of Common Stock (or following a Triggering Event, Common Stock, cash, property, debt securities, common stock or any combination thereof) as the Right Certificate or Certificates surrendered then entitled such holder to purchase at the same Exercise Price. Any registered holder desiring to transfer, split up, combine or exchange any Right Certificate shall make such request in writing delivered to the Rights Agent, and shall surrender the Right Certificate or Certificates to be transferred, split up, combined or exchanged, with the form of assignment and certificate duly executed, at the office or offices of the Rights Agent designated for such purpose. Neither the Rights Agent nor the Company shall be obligated to take any action whatsoever with respect to the transfer of any such surrendered Right Certificate until the registered holder shall have completed and signed the certificate contained in the form of assignment on the reverse side of such Right Certificate and shall have provided such additional evidence of the identity of the Beneficial Owner (or former Beneficial Owner) or Affiliates or Associates thereof as the Company shall reasonably request. Thereupon the Rights Agent shall, subject to Section 4(b), Section 7(e) and Section 14 hereof, countersign and deliver to the Person entitled thereto a Right Certificate or Certificates, as the case may be, as so requested. The Company may require payment by the registered holder of a Right Certificate, of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with any transfer, split up, combination or exchange of Right Certificates.

(b) Upon receipt by the Company and the Rights Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of a Right Certificate, and, in case of loss, theft or destruction, of indemnity or security satisfactory to them, and reimbursement to the Company and the Rights Agent of all reasonable expenses incidental thereto, and upon surrender to the Rights Agent and cancellation of the Right Certificate, if mutilated, the Company will execute and deliver a new Right Certificate of like tenor to the Rights Agent for countersignature and delivery to the registered owner in lieu of the Right Certificate so lost, stolen, destroyed or mutilated.

Section 7. Exercise of Rights; Exercise Price; Expiration Date of Rights.

(a) Subject to Section 7(e), the registered holder of any Right Certificate may exercise the Rights evidenced thereby (except as otherwise provided herein) in whole or in part at any time after the Distribution Date upon surrender of the Right Certificate, with the form of election to purchase and the certificate on the reverse side thereof duly executed, to the Rights Agent at the office or offices of the Rights Agent designated for such purpose, together with payment of the aggregate Exercise Price for the total number of shares of Common Stock (or other securities, cash or other assets, as the case may be) as to which such surrendered Rights are then exercised, at or prior to the Expiration Date. Except as set forth in Section 7(e) hereof and notwithstanding any other provision of this Agreement, any Person who prior to the Distribution Date becomes a record holder of shares of Common Stock may exercise all of the rights of a registered holder of a Right Certificate with respect to the Rights associated with such shares of Common Stock in accordance with the provisions of this Agreement, as of the date such Person becomes a record holder of shares of Common Stock.

(b) The Exercise Price for each share of Common Stock pursuant to the exercise of a Right shall initially be $40.00, shall be subject to adjustment from time to time as provided in Section 11 and Section 13 hereof, and shall be payable in lawful money of the United States of America in accordance with Section 7(c) below.

(c) Upon receipt of a Right Certificate representing exercisable Rights, with the form of election to purchase and the certificate on the reverse side thereof duly executed, accompanied by payment of the Exercise Price for the shares to be purchased and an amount equal to any applicable transfer tax (as determined by the Rights Agent) in cash, or by certified check or bank draft payable to the order of the Company, the Rights Agent shall, subject to Section 20(k) hereof, thereupon promptly (i) (A) requisition from any transfer agent of Common Stock (or make available, if the Rights Agent is the transfer agent therefor) certificates for the number of shares of Common Stock to be purchased and the Company hereby irrevocably authorizes its transfer agent to comply with all such requests, or (B) if the Company shall have elected to deposit the total number of shares of Common Stock issuable upon exercise of the Rights hereunder with a depository agent, requisition from the depository agent depositary receipts representing such number of shares of Common Stock as are to be purchased (in which case certificates for the shares of Common Stock represented by such receipts shall be deposited by the transfer agent with the depositary agent) and the Company will direct the depositary agent to comply with such request, (ii) when appropriate, requisition from the Company the amount of cash, if any, to be paid in lieu of issuance of fractional shares in accordance with Section 14 hereof, (iii) promptly after receipt of such certificates or depositary receipts, cause the same to be delivered to or upon the order of the registered holder of such Right Certificate, registered in such name or names as may be designated by such holder and (iv) when appropriate, after receipt promptly deliver such cash to or upon the order of the registered holder of such Right Certificate. In the event that the Company is obligated to issue other securities (including Common Stock) of the Company, pay cash or distribute other property pursuant to Section 11 (a) hereof, the Company will make all

arrangements necessary so that such other securities, cash or other property are available for distribution by the Rights Agent, if and when appropriate.

(d) In case the registered holder of any Right Certificate shall exercise less than all the Rights evidenced thereby, a new Right Certificate evidencing Rights equivalent to the Rights remaining unexercised shall be issued by the Rights Agent and delivered to the registered holder of such Right Certificate or to his duly authorized assigns, subject to the provisions of Section 14.

(e) Notwithstanding anything in this Agreement to the contrary, from and after the first occurrence of a Section 11(a)(ii) Event, any Rights beneficially owned by (i) an Acquiring Person, or any Associate or Affiliate of an Acquiring Person, (ii) a transferee of an Acquiring Person (or of any Associate or Affiliate of an Acquiring Person) who becomes a transferee after the Acquiring Person becomes such, or (iii) a transferee of an Acquiring Person (or of any Associate or Affiliate of an Acquiring Person) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such and receives such Rights pursuant to either (A) a transfer (whether or not for consideration) from the Acquiring Person to holders of equity interests in such Acquiring Person or to any Person with whom the Acquiring Person has any continuing agreement, arrangement or understanding regarding the transferred Rights, or (B) a transfer which the Board of Directors of the Company has determined is part of a plan, arrangement or understanding which has as a primary purpose or effect the avoidance of this Section 7(e), shall become null and void without any further action; and no holder of such Rights shall have any rights whatsoever with respect to such Rights, whether under any provision of this Agreement or otherwise. The Company shall use all reasonable efforts to ensure that the provisions of this Section 7(e) and Section 4(b) hereof are complied with, but shall have no liability to any holder of Right Certificates or other Person as a result of its failure to make any determinations with respect to an Acquiring Person or any Affiliates or Associates of an Acquiring Person or any transferee of any of them hereunder.

(f) Notwithstanding anything in this Agreement to the contrary, neither the Rights Agent nor the Company shall be obligated to undertake any action with respect to a registered holder of Rights upon the occurrence of any purported exercise as set forth in this Section 7 unless such registered holder shall have (i) completed and signed the certificate contained in the form of election to purchase set forth on the reverse side of the Right Certificate surrendered for such exercise, and (ii) provided such additional evidence of the identity of the Beneficial Owner (or former Beneficial Owner) or Affiliates or Associates thereof as the Company shall reasonably request.

Section 8. Cancellation and Destruction of Right Certificates.

All Right Certificates surrendered for the purpose of exercise, transfer, split up, combination or exchange shall, if surrendered to the Company or any of its agents, be delivered to the Rights Agent for cancellation or in canceled form, or, if surrendered to the Rights Agent, shall be canceled by it, and no Right Certificates shall be issued in lieu thereof except as expressly permitted by any of the provisions of this Agreement. The Company shall

deliver to the Rights Agent for cancellation and retirement, and the Rights Agent shall so cancel and retire, any other Right Certificate purchased or acquired by the Company otherwise than upon the exercise thereof. The Rights Agent shall deliver all canceled Right Certificates to the Company.

Section 9. Reservation and Availability of Common Stock.

(a) The Company covenants and agrees that it will cause to be reserved and kept available out of its authorized and unissued shares of Common Stock or any authorized and issued shares of Common Stock held in its treasury, the number of shares of Common Stock that will be sufficient to permit the exercise in full of all outstanding and exercisable Rights.

(b) So long as the Common Stock (or following a Triggering Event, other securities) issuable or deliverable upon exercise of Rights may be listed on any national securities exchange or automated quotation system, the Company shall use its best efforts to cause, from and after such time as the Rights become exercisable, all shares of Common Stock issued or reserved for issuance to be so listed, upon official notice of issuance, upon the principal national securities exchange, if any, upon which the Common Stock is otherwise listed or, if the principal market for the Common Stock is not on any national securities exchange, to be eligible for quotation on the Nasdaq National Market or any successor thereto or other comparable quotation system.

(c) The Company shall use its best efforts to (i) file, as soon as practicable following the earliest date after the occurrence of a Section 11(a)(ii) Event on which the consideration to be delivered by the Company upon exercise of the Rights has been determined in accordance with Section 11(a)(iii) hereof, or as soon as required by law following the Distribution Date, as the case may be, a registration statement under the Securities Act with respect to the securities purchasable upon exercise of the Rights on an appropriate form, (ii) cause such registration statement to become effective as soon as practicable after such filing, and (iii) cause such registration statement to remain effective (with a prospectus that at all times meets the requirements of the Securities Act) until the earlier of (A) the date as of which the Rights are no longer exercisable for such securities or (B) the Expiration Date. The Company will also take such action as may be appropriate under, and which will ensure compliance with, the securities or "blue sky" laws of the various states in connection with the exercisability of the Rights. The Company may temporarily suspend, for a period of time not to exceed ninety (90) days after the date determined in accordance with the provisions of the first sentence of this Section 9(c), the exercisability of the Rights in order to prepare and file such registration statement and permit it to become effective. Upon such suspension, the Company shall issue a public announcement stating that the exercisability of the Rights has been temporarily suspended, as well as a public announcement at such time as the suspension is no longer in effect, in each case with prompt written notice to the Rights Agent. Notwithstanding any such provision of this Agreement to the contrary, the Rights shall not be exercisable in any jurisdiction unless the requisite qualification in such jurisdiction shall have been obtained.

(d) The Company covenants and agrees that it will take all such action as may be necessary to ensure that all shares of Common Stock delivered upon the exercise of the Rights shall, at the time of delivery of the certificates for such shares (subject to payment of the Exercise Price), be duly and validly authorized and issued and fully paid and nonassessable.

(e) From and after the Distribution Date, the Company further covenants and agrees that it will pay when due and payable any and all federal and state transfer taxes and charges which may be payable in respect of the issuance or delivery of the Right Certificates or of any certificates for shares of Common Stock upon the exercise of Rights. The Company shall not, however, be required to pay any transfer tax which may be payable in respect of any transfer or delivery of Right Certificates to a person other than, or in respect of the issuance or delivery of securities in a name other than that of, the registered holder of the Right Certificates evidencing Rights surrendered for exercise or to issue or deliver any certificates for securities in a name other than that of the registered holder upon the exercise of any Rights until such tax shall have been, paid (any such tax being payable by the holder of such Right Certificate at the time of surrender) or until it has been established to the Company's satisfaction that no such tax is due.

Section 10. Common Stock Record Date.

Each Person in whose name any certificate for Common Stock is issued upon the exercise of Rights shall for all purposes be deemed to have become the holder of record of the shares of Common Stock represented thereby on, and such certificate shall be dated, the date upon which the Right Certificate evidencing such Rights was duly surrendered and payment of the Exercise Price (and any applicable transfer taxes) was made; provided, however, that if the date of such surrender and payment is a date upon which the Common Stock transfer books of the Company are closed, such person shall be deemed to have become the record holder of such shares on, and such certificate shall be dated, the next succeeding Business Day on which the Common Stock transfer books of the Company are open. Prior to the exercise of the Right evidenced thereby, the holder of a Right Certificate shall not be entitled to any rights of a shareholder of the Company with respect to shares for which the Rights shall be exercisable, including, without limitation, the right to vote, to receive dividends or other distributions or to exercise any preemptive rights, and shall not be entitled to receive any notice of any proceedings of the Company, except as provided herein.

Section 11. Adjustment of Exercise Price, Number and Kind of Shares or
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Number of Rights.
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The Exercise Price, the number and kind of shares covered by each Right and the number of Rights outstanding are subject to adjustment from time to time as provided in this Section 11.

(a) (i) In the event the Company shall at any time after the date of this Agreement (A) declare a dividend on the Common Stock payable in shares of Common Stock, (B) subdivide the outstanding Common Stock, (C) combine the outstanding Common Stock into a smaller number of shares, or (D) issue any shares of its capital stock in a reclassification of the

Common Stock (including any such reclassification in connection with a consolidation or merger in which the Company is the continuing or surviving corporation), except as otherwise provided in this Section 11 (a) and Section 7 (e) hereof, the Exercise Price in effect at the time of the record date for such dividend or of the effective date of such subdivision, combination or reclassification, and the number and kind of shares of capital stock issuable on such date, shall be proportionately adjusted so that the holder of any Right exercised after such time shall be entitled to receive the aggregate number and kind of shares of capital stock which, if such Right had been exercised immediately prior to such date and at a time when the Common Stock transfer books of the Company were open, he would have owned upon such exercise and been entitled to receive by virtue of such dividend, subdivision, combination or reclassification; provided, however, that in no event shall the consideration to be paid upon the exercise of a Right be less than the aggregate par value of the shares of capital stock of the Company issuable upon exercise of a Right. If an event occurs which would require an adjustment under both Section 11 (a) (i) and Section 11 (a) (ii) hereof, the adjustment provided for in this Section 11 (a) (i) shall be in addition to, and shall be made prior to, any adjustment required pursuant to Section 11 (a) (ii) hereof.

(ii) Subject to the provisions of Sections 23 and 24 hereof, in the event that any Person (other than an Exempt Person), alone or together with its Affiliates and Associates, shall become an Acquiring Person then, in such case, promptly following any such occurrence, proper provision shall be made so that each holder of a Right, except as provided in Section 7 (e) hereof, shall thereafter have a right to receive, upon exercise thereof at the then current Exercise Price in accordance with the terms of this Agreement, such number of shares of Common Stock of the Company as shall equal the result obtained by (x) multiplying the then current Exercise Price by the then number of shares of Common Stock for which a Right was exercisable immediately prior to the first occurrence of a Section 11(a)(ii) Event and dividing that product by (y) 50% of the Fair Market Value per share of the Common Stock (determined pursuant to Section 11(d)) on the date of the occurrence of any one of the events listed above in this Section 11(a)(ii).

(iii) In the event that there shall not be sufficient authorized but unissued shares of Common Stock to permit the exercise in full of the Rights in accordance with the foregoing Section 11(a)(ii), the Company shall take all action as may be necessary to authorize and reserve for issuance such number of additional shares of Common Stock as may from time to time be required to be issued upon the exercise in full of all Rights outstanding and, if necessary, shall use its best efforts to obtain shareholder approval thereof. Notwithstanding the foregoing provisions of this Section 11(a)(iii), in lieu of issuing shares of Common Stock in accordance with Section 11(a)(ii) hereof, (A) if a majority of the Directors then in office determines that such action is necessary or appropriate and is not contrary to the interests of the holders of the Rights, they may elect to cause the Company to pay, /or (B) if sufficient shares of Common Stock cannot be issued for such purpose in accordance with the provisions hereof, then the Company shall issue or pay, upon the exercise of the Rights, cash, property, debt securities, shares of Common stock or other capital stock, or any combination thereof, having an aggregate Fair Market Value equal to the Fair Market Value of the shares of

Common Stock which otherwise would have been issuable pursuant to Section 11(a)(ii). Any such election by a majority of the Directors of the Company must be made and publicly announced within 30 days after the date on which any Section 11(a)(ii) Event first occurs following the Stock Acquisition Date.

(b) If the Company shall fix a record date for the issuance of rights, options or warrants to all holders of Common Stock entitling them (for a period expiring within 45 calendar days after such record date) to subscribe for or purchase Common Stock (or securities having the same or more favorable rights, privileges and preferences as the shares of Common Stock ("Common stock equivalents")) or securities convertible into Common Stock or Common stock equivalents at a price per share of Common Stock or per share of Common stock equivalents (or having a conversion price per share, if a security convertible into Common Stock or Common stock equivalents) less than the Fair Market Value (as determined pursuant to Section 11 (d) hereof) per share of Common Stock on such record date, the Exercise Price to be in effect after such record date shall be determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding on such record date, plus the number of shares of Common Stock which the aggregate offering price of the total number of shares of Common Stock to be offered (and the aggregate initial conversion price of the convertible securities so to be offered) would purchase at such Fair Market Value and the denominator of which shall be the number of shares of Common Stock outstanding on such record date, plus the number of additional shares of Common Stock and Common stock equivalents to be offered for subscription or purchase (or into which the convertible securities so to be offered are initially convertible); provided, however, that in no event shall
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the consideration to be paid upon the exercise of a Right be less than the aggregate par value of the shares of capital stock of the Company issuable upon exercise of a Right. In case such subscription price may be paid in a consideration part or all of which shall be in a form other than cash, the value of such consideration shall be the Fair Market Value thereof determined in accordance with Section 11(d) hereof. Shares of Common Stock owned by or held for the account of the Company shall not be deemed outstanding for the purpose of any such computation. Such adjustments shall be made successively whenever such a record date is fixed, and in the event that such rights or warrants are not so issued, the Exercise Price shall be adjusted to be the Exercise Price which would then be in effect if such record date had not been fixed.

(c) If the Company shall fix a record date for the making of a distribution to all holders of Common Stock (including any such distribution made in connection with a consolidation or merger in which the Company is the continuing or surviving corporation) of evidences of indebtedness, cash (other than a regular periodic cash dividend out of the earnings or retained earnings of the Company), assets (other than a dividend payable in Common Stock, but including any dividend payable in stock other than Common Stock) or convertible securities, subscription rights or warrants (excluding those referred to in Section 11(b)), the Exercise Price to be in effect after such record date shall be determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the Fair Market Value (as determined pursuant to Section 11 (d) hereof) per share of

Common Stock on such record date, less the Fair Market Value (as determined pursuant to Section 11(d) hereof) of the portion of the cash, assets or evidences of indebtedness so to be distributed or of such convertible securities, subscription rights or warrants applicable to each share of Common Stock and the denominator of which shall be the Fair Market Value (as determined pursuant to Section 11(d) hereof) per share of Common Stock; provided, however, that in no event shall the consideration to be paid upon the exercise of a Right be less than the aggregate par value of the shares of capital stock of the Company issuable upon exercise of a Right. Such adjustments shall be made successively whenever such a record date is fixed, and in the event that such distribution is not so made, the Exercise Price shall again be adjusted to be the Exercise Price which would be in effect if such record date had not been fixed.

(d) For the purpose of this Agreement, the "Fair Market Value" of any share of Common Stock, Common Stock or any other stock or any Right or other security or any other property shall be determined as provided in this Section 11(d).

(i) In the case of a publicly-traded stock or other security, the Fair Market Value on any date shall be deemed to be the average of the daily closing prices per share of such stock or per unit of such other security for the 30 consecutive Trading Days immediately prior to such date; provided, however, that in the event that the Fair Market Value per share of any share of stock is determined during a period following the announcement by the issuer of such stock of (x) a dividend or distribution on such stock payable in shares of such stock or securities convertible into shares of such stock or (y) any subdivision, combination or reclassification of such stock, and prior to the expiration of the 30 Trading Day period after the ex-dividend date for such dividend or distribution, or the record date for such subdivision, combination or reclassification, then, and in each such case, the Fair Market Value shall be properly adjusted to take into account ex-dividend trading. The closing price for each day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the American Stock Exchange or, if the securities are not listed or admitted to trading on the American Stock Exchange, as reported in the principal consolidated transaction reporting system with respect to securities listed on the principal national securities exchange on which such security is listed or admitted to trading; or, if not listed or admitted to trading on any national securities exchange, the last quoted price (or, if not so quoted, the average of the last quoted high bid and low asked prices) in the over-the-counter market, as reported by NASDAQ or such other system then in use; or, if on any such date no bids for such security are quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market in such security selected by the Board of Directors of the Company. If on any such date no market maker is making a market in such security, the Fair Market Value of such security on such date shall be determined reasonably and with utmost good faith to the holders of the Rights by the Board of Directors of the Company; provided, however, that if at the time of such determination there is an Acquiring Person, the Fair Market Value of such security on such date shall be determined by a nationally recognized investment banking firm selected by the Board of Directors, which

determination shall be described in a statement filed with the Rights Agent and shall be binding on the Rights Agent and the holders of the Rights.

(ii) If the Common Stock is not publicly held or not so listed or traded, "Fair Market Value" shall mean the fair value per share of stock or per other unit of such security, determined reasonably and with utmost good faith to the holders of the Rights by the Board of Directors of the Company; provided, however, that if at the time of such determination there is an Acquiring Person, the Fair Market Value of such security on such date shall be determined by a nationally recognized investment banking firm selected by the Board of Directors, which determination shall be described in a statement filed with the Rights Agent and shall be binding on the Rights Agent and the holders of the Rights.

(iii) In the case of property other than securities, the Fair Market Value thereof shall be determined reasonably and with utmost good faith to the holders of Rights by the Board of Directors of the Company; provided, however, that if at the time of such determination there is an Acquiring Person. the Fair Market Value of such property on such date shall be determined by a nationally recognized investment banking firm selected by the Board of Directors, which determination shall be described in a statement filed with the Rights Agent and shall be binding upon the Rights Agent and the holders of the Rights.

(e) Anything herein to the contrary notwithstanding, no adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Exercise Price; provided, however, that any adjustments which by reason of this Section 11(e) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 11 shall be made to the nearest cent or to the nearest [tenth] of a share of Common Stock, as the case may be, or to such other figure as the Board of Directors may deem appropriate. Notwithstanding the first sentence of this Section 11(e), any adjustment required by this Section 11 shall be made no later than the earlier of (i) three (3) years from the date of the transaction which mandates such adjustment or (ii) the Expiration Date.

(f) If as a result of any provision of Section 11(a) hereof, the holder of any Right thereafter exercised shall become entitled to receive any shares of capital stock of the Company other than Common Stock, thereafter the number of such other shares so receivable upon exercise of any Right shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Common Stock contained in Section 11(a), (b), (c), and the provisions of Sections 7, 9, 10, 13 and 14 hereof with respect to the Common Stock shall apply on like terms to any such other shares.

(g) All Rights originally issued by the Company subsequent to any adjustment made to the Exercise Price hereunder shall evidence the right to purchase, at the adjusted Exercise Price, the number of shares of Common Stock purchasable from time to time hereunder upon exercise of the Rights, all subject to further adjustment as provided herein.

(h) Unless the Company shall have exercised its election as provided in Section 11 (i), upon each adjustment of the Exercise Price as a result of the calculations made in Section 11 (b) and (c), each Right outstanding immediately prior to the making of such adjustment shall thereafter evidence the right to purchase, at the adjusted Exercise Price, that number of shares of Common Stock (calculated to the nearest one tenth) obtained by (i) multiplying (x) the number of shares of Common Stock for which a Right may be exercisable immediately prior to this adjustment by (y) the Exercise Price in effect immediately prior to such adjustment of the Exercise Price and (ii) dividing the product so obtained by the Exercise Price in effect immediately after such adjustment of the Exercise Price.

(i) The Company may elect on or after the date of any adjustment of the Exercise Price to adjust the number of Rights, in substitution for any adjustment in the number of shares of Common Stock purchasable upon the exercise of a Right. Each of the Rights outstanding after the adjustment in the number of Rights shall be exercisable for the number of shares of Common Stock for which a Right was exercisable immediately prior to such adjustment. Each Right held of record prior to such adjustment of the number of Rights shall become that number of Rights (calculated to the nearest one tenth) obtained by dividing the Exercise Price in effect immediately prior to adjustment of the Exercise Price by the Exercise Price in effect immediately after adjustment of the Exercise Price. The Company shall make a public announcement of its election to adjust the number of Rights, indicating the record date for the adjustment, and, if known at the time, the amount of the adjustment to be made. This record date may be the date on which the Exercise Price is adjusted or any day thereafter, but, if the Right Certificates have been issued, shall be at least ten (10) days later than the date of the public announcement. If Right Certificates have been issued, upon each adjustment of the number of Rights pursuant to this Section 11(i), the Company shall, as promptly as practicable, cause to be distributed to holders of record of Right Certificates on such record date Right Certificates evidencing, subject to Section 14 hereof, the additional Rights to which such holders shall be entitled as a result of such adjustment, or, at the option of the Company, shall cause to be distributed to such holders of record in substitution and replacement for the Right Certificates held by such holders prior to the date of adjustment, and upon surrender thereof, if required by the Company, new Right Certificates evidencing all the Rights to which such holders shall be entitled after such adjustment. Right Certificates so to be distributed shall be issued, executed and countersigned in the manner provided for herein (and may bear, at the option of the Company, the adjusted Exercise Price) and shall be registered in the names of the holders of record of Right Certificates on the record date specified in the public announcement.

(j) Irrespective of any adjustment or change in the Exercise Price or the number of shares of Common Stock issuable upon, the exercise of the Rights, the Right Certificates theretofore and thereafter issued may continue to express the Exercise Price per share and the number of shares which were expressed in the initial Right Certificates issued hereunder.

(k) Before taking any action that would cause an adjustment reducing the Exercise Price below the then stated value, if any, of the number of shares of Common Stock issuable

upon exercise of the Rights, the Company shall take any corporate action which may, in the opinion of its counsel, be necessary in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Exercise Price.

(l) In any case in which this Section 11 shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, the Company may elect to defer until the occurrence of such event the issuing to the holder of any Right exercised after such record date the number of shares of Common Stock or other capital stock or securities of the Company, if any, issuable upon such exercise over and above the number of shares of Common Stock and other capital stock or securities of the Company, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; provided, however, that the Company shall deliver to such holder a due bill or other appropriate instrument evidencing such holder's right to receive such additional shares upon the occurrence of the event requiring such adjustment.

(m) Anything in this Section 11 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Exercise Price, in addition to those adjustments expressly required by this Section 11, as and to the extent that it in its sole discretion shall determine to be advisable in order that any (i) consolidation or subdivision of the Common Stock, (ii) issuance wholly for cash of any shares of Common Stock at less than the Fair Market Value, (iii) issuance wholly for cash of shares of Common Stock or securities which by their terms are convertible into or exchangeable for shares of Common Stock, (iv) stock dividends, or (v) issuance of rights, options or warrants referred to hereinabove in this Section 11 hereafter made by the Company to holders of its Common Stock shall not be taxable to such shareholders.

(n) The Company covenants and agrees that it shall not, at any time after the Distribution Date and so long as the Rights have not been redeemed pursuant to Section 23 hereof or exchanged pursuant to Section 24 hereof, (i) consolidate with any other Person, (ii) merge with or into any other Person, or (iii) sell or transfer (or permit any Subsidiary to sell or transfer), in one transaction or a series of related transactions, assets or earning power aggregating 50% or more of the assets or earning power of the Company and its Subsidiaries taken as a whole, to any other Person if (x) at the time of or immediately after such consolidation, merger or sale there are any rights, warrants or other instruments outstanding or agreements or arrangements in effect which would substantially diminish or otherwise eliminate the benefits intended to be afforded by the Rights, or (y) prior to, simultaneously with or immediately after such consolidation, merger or sale the shareholders of a person who constitutes, or would constitute, the "Principal Party" for the purposes of Section 13(a) hereof shall have received a distribution of Rights previously owned by such Person or any of its Affiliates and Associates. The Company further covenants and agrees that after the Distribution Date it will not, except as permitted by Section 23 or Section 27 hereof, take (or permit any Subsidiary to take) any action if at the time such action is taken it is reasonably foreseeable that such action will substantially diminish or otherwise eliminate the benefits intended to be afforded by the Rights.

(o) The exercise of Rights under Section 11(a)(ii) shall only result in the loss of rights under Section 11(a)(ii) to the extent so exercised and shall not otherwise affect the rights of holders of Right Certificates under this Rights Agreement, including rights to purchase securities of the Principal Party following a Section 13 Event which has occurred or may thereafter occur, as set forth in Section 13 hereof. Upon exercise of a Right Certificate under Section 11(a)(ii), the Rights Agent shall return such Right Certificate duly marked to indicate that such exercise has occurred.

Section 12. Certificate of Adjusted Exercise Price or Number of Shares.

Whenever an adjustment is made as provided in Section 11 or Section 13 hereof, the Company shall (a) promptly prepare a certificate setting forth such adjustment and a brief statement of the facts accounting for such adjustment, (b) promptly file with the Rights Agent and with each transfer agent for the Common Stock a copy of such certificate, and (c) mail a brief summary thereof to each holder of a Right Certificate in accordance with Section 26 hereof. The Rights Agent shall be fully protected in relying on any such certificate and on any adjustment contained therein and shall not be deemed to have knowledge of any such adjustment unless and until it shall have' received such certificate.

Section 13. Consolidation, Merger or Sale or Transfer of Assets or Earning

Power.

(a) In the event that, following the Stock Acquisition Date, directly or indirectly, (x) the Company shall consolidate with, or merge with and into, any other Person (other than a Subsidiary of the Company in a transaction which is not prohibited by Section 11(n) hereof), and the Company shall not be the continuing or surviving corporation of such consolidation or merger, (y) any Person (other than a Subsidiary of the Company in a transaction which is not prohibited by Section 11(n) hereof) shall consolidate with the Company, or merge with and into the Company and the Company shall be the continuing or surviving corporation of such merger and, in connection with such merger, all or part of the shares of Common Stock shall be changed into or exchanged for stock or other securities of any other Person or cash or any other property, or (z) the Company shall sell, mortgage or otherwise transfer (or one or more of its Subsidiaries shall sell, mortgage or otherwise transfer), in one transaction or a series of related transactions, assets or earning power aggregating 50% or more of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to any other Person or Persons (other than the Company or any Subsidiary of the Company in one or more transactions, each of which is not prohibited by Section 11(n) hereof), then, and in each such case, proper provision shall be made so that: (i) each holder of a Right, except as provided in Section 7(e) hereof, shall have the right to receive, upon the exercise thereof at the then current Exercise Price in accordance with the terms of this Agreement, such number of validly authorized and issued, fully paid and nonassessable shares of freely tradeable common stock of the Principal Party, free and clear of rights of call or first refusal, liens, encumbrances or other adverse claims, as shall be equal to the result obtained by (1) multiplying the then current Exercise Price by the number of shares of Common Stock for which a Right is exercisable immediately prior to the first occurrence of a Section 13 Event, and dividing that product by (2) 50% of the Fair Market Value (determined pursuant to Section 11(d) hereof) per share of the common stock of such Principal Party on the date of consummation of such consolidation, merger, sale or transfer; (ii) such Principal Party shall thereafter be liable for, and shall assume, by virtue of such consolidation, merger, sale, mortgage or transfer, all the obligations and duties of the Company pursuant to this Agreement; (iii) the term "Company" shall thereafter be deemed to refer to such Principal Party, it being specifically intended that the provisions of Section 11 hereof shall apply to such Principal Party; and (iv) such Principal Party shall take such steps (including, but not limited to, the reservation of a sufficient number of shares of its common stock to permit exercise of all outstanding Rights in accordance with this Section 13(a) and the

making of payments in cash and/or other securities in accordance with Section 11(a)(iii) hereof) in connection with such consummation as may be necessary to assure that the provisions hereof shall thereafter be applicable, as nearly as reasonably may be, in relation to its shares of common stock thereafter deliverable upon the exercise of the Rights.

(b) "Principal Party" shall mean:

(i) in the case of any transaction described in clause (x) or (y) of the first sentence of Section 13(a), the Person that is the issuer of any securities into which shares of Common Stock of the Company are converted in such merger or consolidation, and if no securities are so issued, the Person that is the other party to the merger or consolidation; and

(ii) in the case of any transaction described in clause (z) of the first sentence of Section 13(a), the Person that is the party receiving the greatest portion of the assets or earning power transferred pursuant to such transaction or transactions;

provided, however, that in any such case, (x) if the common stock of such Person
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is not at such time and has not been continuously over the preceding 12-month period registered under Section 12 of the Exchange Act, and such Person is a direct or indirect Subsidiary or Affiliate of another Person the common stock of which is and has been so registered, "Principal Party" shall refer to such other Person; (y) in case such Person is a direct or indirect Subsidiary or Affiliate of more than one Person, the common stock of two or more of which are and have been so registered, "Principal Party" shall refer to whichever of such Persons is the issuer of the common stock having the greatest aggregate market value of shares outstanding; and (z) in case such Person is owned, directly or indirectly, by a joint venture formed by two or more Persons that are not owned, directly or indirectly, by the same Person, the rules set forth in (x) and (y) above shall apply to each of the chains of ownership having an interest in such joint venture as if such party were a "Subsidiary" of both or all of such joint ventures and the Principal Parties in each such chain shall bear the obligations set forth in this Section 13 in the same ratio as their direct or indirect interests in such Person bear to the total of such interests.

(c) The Company shall not consummate any such consolidation, merger, sale or transfer unless prior thereto (x) the Principal Party shall have a sufficient number of authorized shares of its common stock issued or reserved for issuance to permit the exercise in full of the Rights in accordance with this Section 13, and (y) the Company and each Principal Party and each other Person who may become a Principal Party as a result of such consolidations merger, sale or transfer shall have executed and delivered to the Rights Agent a supplemental agreement providing for the terms set forth in Section 13(a) and (b) and further providing that, as soon as practicable after the date of any consolidation, merger, sale or transfer of assets mentioned in Section 13(a), the Principal Party at its own expense will:

(i) prepare and file a registration statement under the Securities Act with respect to the Rights and the securities purchasable upon exercise of the Rights on an appropriate form, use its best efforts to cause such registration statement to become effective as soon as

practicable after such filing and use its best efforts to cause such registration statement to remain effective (with a prospectus that at all times meets the requirements of the Securities Act) until the Expiration Date;

(ii) use its best efforts to qualify or register the Rights and the securities purchasable upon exercise of the Rights under the blue sky laws of such jurisdictions as may be necessary or appropriate;

(iii) use its best efforts to list (or continue the listing of) the Rights and the securities purchasable upon exercise of the Rights on a national securities exchange or to meet the eligibility requirements for quotation on the NASDAQ National Market; and

(iv) deliver to holders of the Rights historical financial statements for the Principal Party and each of its Affiliates which comply in all material respects with the requirements for registration on Form 10 under the Exchange Act.

The provisions of this Section 13 shall similarly apply to successive mergers or consolidations or sales or other transfers.

Section 14. Fractional Rights and Fractional Shares.

(a) The Company shall not be required to issue fractions of Rights, except prior to the Distribution Date as provided in Section 11(o) hereof, or to distribute Right Certificates which evidence fractional Rights. If the Company elects not to issue such fractional Rights, the Company shall pay, in lieu of such fractional Rights, to the registered holders of the Right Certificates with regard to which such fractional Rights would otherwise be issuable, an amount in cash equal to the same fraction of the Fair Market Value of a whole Right, as determined pursuant to Section 11(d) hereof.

(b) The Company shall not be required to issue fractions of shares of Common Stock upon exercise of the Rights or to distribute certificates which evidence fractional shares of Common Stock. In lieu of fractional shares of Common Stock, the Company may pay to the registered holders of Right Certificates at the time such Rights are exercised as herein provided an amount in cash equal to the same fraction of the Fair Market Value of one share of Common Stock. For purposes of this Section 14 (b), the Fair Market Value of one share of Common Stock shall be determined pursuant to Section 11(d) hereof for the Trading Day immediately prior to the date of such exercise.

(c) The holder of a Right by the acceptance of the Rights expressly waives his right to receive any fractional Rights or any fractional shares upon exercise of a Right, except as permitted by this Section 14.

Section 15. Rights of Action.

All rights of action in respect of this Agreement, other than rights of action vested in the Rights Agent pursuant to Sections 18 and 20 hereof, are vested in the respective registered holders of the Right Certificates (or, prior to the Distribution Date, the registered holders of the Common Stock). Any registered holder of any Right Certificate (or, prior to the Distribution Date, of the Common Stock), without the consent of the Right Agent or of the holder of any other Right Certificate (or, prior to the Distribution Date, of the Common Stock), may, on his own behalf and for his own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company to enforce, or otherwise act in respect of, his right to exercise the Right evidenced by such Right Certificate in the manner provided in such Right Certificate and in this Agreement. Without limiting the foregoing or any remedies available to the holders of Rights, it is specifically acknowledged that the holders of Rights would not have an adequate remedy at law for any breach of this Agreement and shall be entitled to specific performance of the obligations hereunder and injunctive relief against actual or threatened violations of the obligations hereunder of any Person subject to this Agreement. Holders of Rights shall be entitled to recover the reasonable costs and expenses, including attorneys' fees, incurred by them in any action to enforce the provisions of this Agreement.

Section 16. Agreement of Right Holders.

Every holder of a Right, by accepting the same, consents and agrees with the Company and the Rights Agent and with every other holder of a Right that:

(a) prior to the Distribution Date, each Right will be transferable only simultaneously and together with the transfer of shares of Common Stock;

(b) after the Distribution Date, the Right Certificates are transferable only on the registry books of the Rights Agent if surrendered at the office or offices of the Rights Agent designated for such purpose, duly endorsed or accompanied by a proper instrument of transfer;

(c) the Company and the Rights Agent may deem and treat the person in whose name a Right Certificate (or, prior to the Distribution Date, the associated Common Stock certificate) is registered as the absolute owner thereof and of the Rights evidenced thereby (notwithstanding any notations of ownership or writing on the Right Certificates or the associated Common Stock certificate made by anyone other than the Company or the Rights Agent) for all purposes whatsoever, and neither the Company nor the Rights Agent shall be affected by any notice to the contrary; and

(d) notwithstanding anything in this Agreement to the contrary, neither the Company nor the Rights Agent shall have any liability to any holder of a Right or other Person as the result of its inability to perform any of its obligations under this Agreement by reason of any preliminary or permanent injunction or other order, decree or ruling issued by a court of competent jurisdiction or by a governmental, regulatory or administrative agency or commission, or any statute, rule, regulation or executive order promulgated or enacted by any

governmental authority prohibiting or otherwise restraining performance of such obligations; provided, however, that the Company must use its best efforts to have any such order, decree or ruling lifted or otherwise overturned as soon as possible.

Section 17. Right Certificate Holder Not Deemed a Shareholder.

No holder of any Right Certificate, as such, shall be entitled to vote, receive dividends or be deemed for any purpose the holder of the shares of Common Stock or any other securities of the Company which may at any time be issuable on the exercise of the Rights represented thereby, nor shall anything contained herein or in any Right Certificate be construed to confer upon the holder of any Right Certificate, as such, any of the rights of a shareholder of the Company or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting shareholders (except as provided in Section 25 hereof), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by such Right Certificate shall have been exercised in accordance with the provisions hereof.

Section 18. Concerning the Rights Agent.

(a) The Company agrees to pay to the Rights Agent such compensation as shall be agreed to in writing between the Company and the Rights Agent for all services rendered by it hereunder and, from time to time, on demand of the Rights Agent, its reasonable expenses and counsel fees and disbursements and other disbursements incurred in the administration and execution of this Agreement and the exercise and performance of its duties hereunder. The Company also agrees to indemnify the Rights Agent for, and to hold it harmless against, any loss, liability, or expense, incurred without gross negligence, bad faith or willful misconduct on the part of the Rights Agent, for anything done or omitted by the Rights Agent in connection with the acceptance and administration of this Agreement, including the costs and expenses of defending against any claim of liability arising therefrom, directly or indirectly. The provisions of this Section 18(a) shall survive the expiration of the Rights and the termination of this Agreement.

(b) The Rights Agent shall be protected and shall incur no liability for or in respect of any action taken, suffered or omitted by it in connection with its administration of this Agreement in reliance upon any Right Certificate or certificate for Common Stock or other securities of the Company, instrument of assignment or transfer, power of attorney, endorsement, affidavit, letter, notice, direction, consent, certificate, statement, or other paper or document believed by it to be genuine and to be signed and executed by the proper Person or Persons.

(c) The Rights Agent shall not be liable for consequential damages under any provision of this Agreement or for any consequential damages arising out, of any act or failure to act hereunder.

Section 19. Merger or Consolidation of or Change of Name of Rights Agent.

(a) Any corporation into which the Rights Agent or any successor Rights Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Rights Agent or any successor Rights Agent shall be a party, or any corporation succeeding to the corporate trust or shareholder services business of the Rights Agent or any successor Rights Agent, shall be the successor to the Rights Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor Rights Agent under the provisions of Section 21 hereof. In case at the time such successor Rights Agent shall succeed to the agency created by this Agreement any of the Right Certificates shall have been countersigned but not delivered, any such successor Rights Agent may adopt the countersignature of the predecessor Rights Agent and deliver such Right Certificates so countersigned; and in case at that time any of the Right Certificates shall not have been countersigned, any Successor Rights Agent may countersign such Right Certificates either in the name of the predecessor or in the name of the successor Rights Agent; and in all such cases such Right Certificates shall have the full force provided in the Right Certificates and in this Agreement.

(b) In case at any time the name of the Rights Agent shall be changed and at such time any of the Right Certificates shall have been countersigned but not delivered, the Rights Agent may adopt the countersignature under its prior name and deliver Right Certificates so countersigned; and in case at that time any of the Right Certificates shall not have been countersigned, the Rights Agent may countersign such Right Certificates either in its prior name or in its changed name; and in all such cases such Right Certificates shall have the full force provided in the Right Certificates and in this Agreement.

Section 20. Duties of Rights Agent.

The Rights Agent undertakes the duties and obligations expressly imposed by this Agreement upon the following terms and conditions, by all of which the Company and the holders of Right Certificates, by their acceptance thereof, shall be bound :

(a) The Rights Agent may consult with legal counsel selected by it (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Rights Agent as to any action taken or omitted by it in good faith and in accordance with such open on.

(b) Whenever in the performance of its duties under this Agreement the Rights Agent shall deem it necessary or desirable that any fact or matter (including, without limitation, the identity of any Acquiring Person and the determination of Fair Market Value) be proved or established by the Company prior to taking or suffering any action hereunder, such, fact or matter (unless other evidence in respect thereof shall be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by a person believed

by the Rights Agent to be the Chairman of the Board, a Vice Chairman of the Board, the President, a Vice President, the Treasurer, any Assistant Treasurer, the Secretary or Assistant Secretary of the Company and delivered to the Rights Agent, and such certificate shall be full authorization to the Rights Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate.

(c) The Rights Agent shall be liable hereunder only for its own gross negligence, bad faith or willful misconduct.

(d) The Rights Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Right Certificates (except its countersignature thereof) or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only.

(e) The Rights Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Rights Agent) or in respect of the validity or execution of any Right Certificate (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Right Certificate; nor shall it be responsible for any change in the exercisability of the Rights (including the Rights becoming void pursuant to Section 7(e) hereof) or any adjustment required under the provisions of Sections 11, 13 or 23(c) hereof, nor shall it be responsible for the manner, method or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment (except with respect to the exercise of Rights evidenced by Right Certificates after receipt of a certificate describing any such adjustment furnished in accordance with Section 12 hereof), nor shall it be responsible for any determination by the Board of Directors of the Company of the Fair Market Value of the Rights or Common Stock pursuant to the provisions of Section 14 hereof; nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Right Certificate or as to whether any shares of Common Stock will, when so issued, be validly authorized and issued, fully paid and nonassessable.

(f) The Company agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the Rights Agent for the carrying out or performing by the Rights Agent of the provisions of this Agreement.

(g) The Rights Agent is hereby authorized and directed to accept instructions with respect to the performance of its duties hereunder and certificates delivered pursuant to any provision hereof from any person believed by the Rights Agent to be the Chairman of the Board, any Vice Chairman of the Board, the President, a Vice President, the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer of the Company, and is authorized to apply to such officers for advice or instructions in connection with its duties, and it shall not be liable for any action taken or suffered to be taken by it in good faith in accordance with instructions of any such officer. Any application by the Rights Agent for written instructions

from the Company may, at the option of the Rights Agent, set forth in writing any action proposed to be taken or omitted by the Rights Agent under this Agreement and the date on or after which such action shall be taken or such omission shall be effective. The Rights Agent shall not be liable for any action taken by, or omission of, the Rights Agent in accordance with a proposal included in such application on or after the date specified in such application (which date shall not be less than five Business Days after the date any officer of the Company actually receives such application, unless any such officer shall have consented in writing to an earlier date) unless, prior to taking any such action (or the effective date in the case of an omission), the Rights Agent shall have received written instructions in response to such application specifying the action to be taken or omitted.

(h) The Rights Agent and any shareholder, director, officer or employee of the Rights Agent may buy, sell or deal in any of the Rights or other securities of the Company or become peculiarly interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not the Rights Agent under this Agreement. Nothing herein shall preclude the Rights Agent from acting in any other capacity for the Company or for any other legal entity.

(i) The Rights Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys or agents, and the Rights Agent shall not be answerable or accountable for any act, omission, default, neglect or misconduct of any such attorneys or agents or for any loss to the Company or to the holders of the Rights resulting from any such act, omission, default, neglect or misconduct, provided reasonable care was exercised in the selection and continued employment thereof.

(j) No provision of this Agreement shall require the Rights Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or in the exercise of its rights if there shall be reasonable grounds for believing that repayment of such funds or adequate indemnification against such risk or liability is not reasonably assured to it.

(k) If, with respect to any Right Certificate surrendered to the Rights Agent for exercise or transfer, the certificate attached to the form of assignment or form of election to purchase, as the case may be, has either not been completed or indicates an affirmative response to clause (1) or clause (2) thereof, the Rights Agent shall not take any further action with respect to such requested exercise or transfer without first consulting with the Company.

Section 21. Change of Rights Agent.

The Rights Agent or any successor Rights Agent may resign and be discharged from its duties under this Agreement upon thirty (30) days' notice in writing mailed to the Company by first class mail. The Company may remove the Rights Agent or any successor Rights Agent (with or without cause) upon thirty (30) days' notice in writing, mailed to the Rights Agent or

successor Rights Agent, as the case may be, and to the transfer agent of the Common Stock by registered or certified mails and to the holders of the Right Certificates by first-class mail. If the Rights Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Rights Agent. If the Company shall fail to make such appointment within a period of thirty (30) days after giving notice of such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Rights Agent or by the holder of a Right Certificate (who shall, with such notice, submit his Right Certificate for inspection by the Company), then the incumbent Rights Agent or the registered holder of any Right Certificate may apply to any court of competent jurisdiction for the appointment of a new Rights Agent. Any successor Rights Agent, whether appointed by the Company or by such a court, shall be (a) a corporation organized and doing business under the laws of the United States or of the Commonwealth of Massachusetts or the State of New York (or of any other state of the United States so long as such corporation is authorized to do business as a banking institution in the Commonwealth of Massachusetts or the State of New York), in good standing, which is authorized under such laws to exercise stock transfer or corporate trust powers and is subject to supervision or examination by federal or state authority and which has at the time of its appointment as Rights Agent a combined capital and surplus of at least $10,000,000 or (b) an Affiliate of a corporation described in clause (a) of this sentence. After appointment, the successor Rights Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Rights Agent without further act or deed; but the predecessor Rights Agent shall delete and transfer to the successor Rights Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment, the Company shall file notice thereof in writing with the predecessor Rights Agent and the transfer agent of the Common Stock, and mail a notice thereof in writing to the registered holders of the Right Certificates. Failure to give any notice provided for in this Section 21, however, or any defect therein, shall not affect the legality or validity of the resignation or removal of the Rights Agent or the appointment of the successor Rights Agent, as the case may be.

Section 22. Issuance of New Right Certificates.

Notwithstanding any of the provisions of this Agreement or of the Rights to the contrary, the Company may, at its option, issue new Right Certificates evidencing Rights in such form as may be approved by its Board of Directors to reflect any adjustment or Change in the Exercise Price per share and the number or kind or class of shares of stock or other securities or property purchasable under the Right Certificates made in accordance with the provisions of this Agreement. In addition, in connection with the issuance or sale of shares of Common Stock following the Distribution Date and prior to the redemption or expiration of the Rights, the Company (a) shall, with respect to shares of Common Stock so issued or sold pursuant to the exercise of stock options or under any employee plan or arrangement, or upon the exercise, conversion or exchange of securities hereafter issued by the Company, and (b) may, in any other case, if deemed necessary or appropriate by the Board of Directors of the Company, issue Right Certificates representing the appropriate number of Rights in connection with such issuance or sale; provided, however, that (i) no such
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Right Certificate shall be

issued if, and to the extent that, the Company shall be advised by counsel that such issuance would create a significant risk of material adverse tax consequences to the Company or the person to whom such Right Certificate would be issued, and (ii) no such Right Certificate shall be issued if, and to the extent that, appropriate adjustments shall otherwise have been made in lieu of the issuance thereof.

Section 23. Redemption and Termination.

(a) The Board of Directors of the Company may, at its option, redeem all but not less than all of the then outstanding Rights at a redemption price of $0.01 per Right, appropriately adjusted to reflect any dividend declared or paid on the Common Stock in shares of Common Stock or any subdivision or combination of the outstanding shares of Common Stock or similar event occurring after the date of this Agreement (such redemption price, as adjusted from time to time, being hereinafter referred to as the "Redemption Price"). The Rights may be redeemed only until the earliest to occur of (i) 5:00 P.M., Boston, Massachusetts time, on the tenth Business Day after the Stock Acquisition Date, or (ii) the Final Expiration Date.

(b) Immediately upon the action of the Board of Directors of the Company ordering the redemption of the Rights, and without any further action and without any notice, the right to exercise the Rights will terminate and the only right thereafter of the holders of Rights shall be to receive the Redemption Price for each Right so held. Promptly after the action of the Board of Directors ordering the redemption of the Rights, the Company shall give notice of such redemption to the Rights Agent and the holders of the then outstanding Rights by mailing such notice to the Rights Agent and to all such holders at their last addresses as they appear upon the registry books of the Rights Agent or, prior to the Distribution Date, on the registry books of the transfer agent for the Common Stock. Any notice which is mailed in the manner herein provided shall be deemed given, whether or not the holder receives the notice. Each such notice of redemption will state the method by which the payment of the Redemption Price will be made. Neither the Company nor any of its Affiliates or Associates may redeem, acquire or purchase for value any Rights at any time in any manner other than that specifically set forth in this Section 23 or Section 24 hereof or in connection with the purchase of shares of Common Stock prior to the Distribution Date.

(c) The Company may, at its option, pay the Redemption Price in cash, shares of Common Stock (based on the Fair Market Value of the Common Stock as of the time of redemption) or any other form of consideration deemed appropriate by the Board of Directors.

Section 24. Exchange.

(a) The Board of Directors of the Company may, at its option, at any time on or after the occurrence of a Section 11(a)(ii) Event, exchange all or part of the then outstanding and exercisable Rights (which shall not include Rights that have become void pursuant to the provisions of Section 7(e) hereof) for shares of Common Stock at an exchange ratio of one share of Common Stock per Right, appropriately adjusted to reflect any stock split, stock dividend or

similar transaction occurring after the date hereof (such exchange ratio being hereinafter referred to as the "Exchange Ratio"). Notwithstanding the foregoing, the Board of Directors shall not be empowered to effect such exchange at any time after any Person (other than an Exempt Person), together with all Affiliates and Associates of such Person, becomes the Beneficial Owner of 50% or more of the Common Stock of the Company.

(b) Immediately upon the action of the Company ordering the exchange of any Rights pursuant to subsection (a) of this Section 24 and without any further action and without any notice, the right to exercise such Rights shall terminate and the only right thereafter of a holder of such Rights shall be to receive that number of shares of Common Stock equal to the number of such Rights held by such holder multiplied by the Exchange Ratio. The Company shall promptly give notice of any such exchange in accordance with Section 26 hereof; provided, --------
however, that the failure to give, or any defect in, such notice shall not affect the validity of such exchange. Each such notice of exchange will state the method by which the exchange of the shares of Common Stock for Rights will be effected and, in the event of any partial exchange, the number of Rights which will be exchanged. Any partial exchange shall be effected pro rata based on the number of Rights (other than Rights which have become void pursuant to the provisions of Section 7(e) hereof) held by each holder of Rights.

(c) In the event that there shall not be sufficient shares of Common Stock issued but not outstanding or authorized but unissued to permit any exchange of Rights as contemplated in accordance with this Section 24, the Company shall take all such action as may be necessary to authorize additional shares of Common Stock for issuance upon exchange of the Rights.

(d) The Company shall not be required to issue fractions of Common Stock or to distribute certificates which evidence fractional shares of Common Stock. If the Company elects not to issue such fractional shares of Common Stock, the Company shall pay, in lieu of such fractional shares of Common Stock, to the registered holders of the Right Certificates with regard to which such fractional shares of Common Stock would otherwise be issuable, an amount in cash equal to the same fraction of the Fair Market Value of a whole share of Common Stock. For the purposes of this paragraph (e), the Fair Market Value of a whole share of Common Stock shall be the closing price of a share of Common Stock (as determined pursuant to the second sentence of section 11(d)(i) hereof) for the Trading Day immediately prior to the date of exchange pursuant to this Section 24.

Section 25. Notice of Certain Events.

(a) In case the Company shall propose, at any time after the Distribution Date, (i) to pay any dividend payable in stock of any class to the holders of Common Stock or to make any other distribution to the holders of Common Stock (other than a regular periodic cash dividend out of earnings or retained earnings of the Company), or (ii) to offer to the holders of Common Stock rights or warrants to subscribe for or to purchase any additional shares of Common Stock or shares of stock of any class or any other securities, rights or options, or (iii) to effect any reclassification of its Common Stock (other than a reclassification involving only the subdivision of outstanding shares of Common Stock), or (iv) to effect any consolidation or merger into or with, or to effect any sale, mortgage or other transfer (or to permit one or more of its Subsidiaries to effect any sale, mortgage or other transfer), in one transaction or a series of related transactions, of 50% or more of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to, any other Person (other than a Subsidiary of the Company in one or more transactions each of which is not prohibited by Section 11 (n) hereof), or (v) to effect the liquidation, dissolution or winding up of the Company, (vi) to declare or pay any dividend on the Common Stock payable in Common Stock or to effect a subdivision, combination or consolidation of the Common Stock (by reclassification or otherwise than by payment of dividends in Common Stock) then in each such case, the Company shall give to each holder of a Right Certificate and to the Rights Agent, in accordance with Section 26 hereof, a notice of such proposed action, which shall specify the record date for the purposes of such stock dividend, distribution of rights or warrants, or the date on which such reclassification, consolidation, merger, sale, transfer, liquidation, dissolution, or winding up is to take place and the date of participation therein by the holders of the shares of Common Stock, if any such date is to be fixed, and such notice shall be so given in the case of any action covered by clause (i) or (ii) above at least twenty (20) days prior to the record date for determining holders of the shares of Common Stock for purposes of such action, and in the case of any such other action, at least twenty (20) days prior to the date of the taking of such proposed action or the date of participation therein by the holders of the shares of Common Stock, whichever shall be the earlier.

(b) In case any Section 11(a)(ii) Event shall occur, then, in any such case, the Company shall as soon as practicable thereafter give to each registered holder of a Right Certificate and to the Rights Agent, in accordance with Section 26 hereof, a notice of the occurrence of such event, which shall specify the event and the consequences of the event to holders of Rights under Section 11(a)(ii) hereof.

Section 26. Notices.

Notices or demands authorized by this Agreement to be given or made by the Rights Agent or by the holder of any Right Certificate to or on the Company shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Rights Agent) as follows:

American Stock Transfer & Trust Company
40 Wall Street
New York, NY 10005

Subject to the provisions of Section 21, any notice or demand authorized by this Agreement to be given or made by the Company or by the holder of any Right Certificate to or on the Rights Agent shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Company) as follows:

Alpha Industries, Inc.
20 Sylvan Road
Woburn, MA 01801

Notices or demands authorized by this Agreement to be given or made by the Company or the Rights Agent to the holder of any Right Certificate (or, prior to the Distribution Date, to the holder of any certificate representing shares of Common Stock) shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed to such holder at the address of such holder as shown on the registry books of the Company.

Section 27. Supplements and Amendments.

Prior to the Distribution Date, the Company and the Rights Agent shall, if the Company so directs, supplement or amend any provision of this Agreement as the Company may deem necessary or desirable without the approval of any holders of certificates representing shares of Common Stock. From and after the Distribution Date, the Company and the Rights Agent shall, if the Company so directs, supplement or amend this Agreement without the approval of any holder of Right Certificates in order (i) to cure any ambiguity, (ii) to correct or supplement any provision contained herein which may be defective or inconsistent with any other provisions herein, (iii) to shorten or lengthen any time period hereunder, or (iv) to change or supplement the provisions hereof in any manner which the Company may deem necessary or desirable and which shall not adversely affect the interests of the holders of Right Certificates (other than an Acquiring Person or any Affiliate or Associate thereof); provided, however, that from and after the Distribution Date this Agreement may not be supplemented or amended to lengthen, pursuant to clause (iii) of this sentence, (A) a time period relating to when the Rights may be redeemed at such time as the Rights are not then redeemable or (B) any other time period unless such lengthening is for the purpose of protecting, enhancing or clarifying the rights of, and the benefits to, the holders of Rights. Upon the delivery of such certificate from an appropriate officer of the Company which states that the proposed supplement or amendment is in compliance with the terms of this Section 27, the Rights Agent shall execute such supplement or amendment. Prior to the Distribution Date, the interests of the holders of Rights shall be deemed coincident with the interests of the holders of Common Stock. Notwithstanding any other provision hereof, the Rights Agent's consent must be obtained regarding any amendment or supplement pursuant to this Section 27 which alters the Rights Agent's rights or duties.

Section 28. Successors.

All the covenants and provisions of this Agreement by or for the benefit of the Company or the Rights Agent shall bind and inure to the benefit of their respective successors and assigns hereunder.

Section 29. Determinations and Actions by the Board of Directors.

For all purposes of this Agreement, any calculation of the number of shares of Common Stock outstanding at any particular time, including for purposes of determining the particular percentage of such outstanding shares of Common Stock of which any Person is the Beneficial Owner, shall be made in accordance with the last sentence of Rule 13d-3(d)(1)(i) of the rules under the Exchange Act as in effect on the date hereof. The Board of Directors of the Company shall have the exclusive power and authority to administer this Agreement and to exercise all rights and powers specifically granted to the Board or to the Company, or as may be necessary or advisable in the administration of this Agreement, including without limitation, the right and power to (i) interpret the provisions of this Agreement and (ii) make all determinations deemed necessary or advisable for the administration of this Agreement (including a determination to redeem or not redeem the Rights or to amend the Agreement). All such actions, calculations, interpretations and determinations (including, for purposes of clause (y) below, all omissions with respect to the foregoing) which are done or made by the Board of Directors in good faith shall (x) be final, conclusive and binding on the Company, the Rights Agent, the holders of the Rights and all other parties, and (y) not subject any member of the Board of Directors to any liability to the holders of the Rights or to any other person.

Section 30. Benefits of this Agreement.

Nothing in this Agreement shall be construed to give to any person or corporation other than the Company, the Rights Agent and the registered holders of the Right Certificates (and, prior to the Distribution Date, the Common Stock) any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Rights Agent and the registered holders of the Right Certificates (and, prior to the Distribution Date, registered holders of the Common Stock).

Section 31. Severability.

If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated; provided, however, that notwithstanding anything in this Agreement to the contrary, if any such term, provision, covenant or restriction is held by such court or authority to be invalid, void or unenforceable and the Board of Directors of the Company determines in its good faith judgment that severing the invalid language from the Agreement would adversely affect the purpose or effect of the Agreement, the right of redemption set forth in Section 23 hereof shall be reinstated and shall not expire until the close of business on the tenth day following the date of such determination by the Board of Directors.

Section 32. Governing Law.

This Agreement, each Right and each Right Certificate issued hereunder shall be deemed to be a contract made under the laws of the State of Delaware and for all purposes shall be governed by and construed in accordance with the laws of such State applicable to contracts to be made and to be performed entirely within such State.

Section 33. Counterparts.

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 34. Descriptive Headings.

Descriptive headings of the several Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and their respective corporate seals to be hereunto affixed and attested, all as of the day and year first above written.

ATTEST: ALPHA INDUSTRIES, INC.

By: By:

Name:
Title:

ATTEST:

AMERICAN STOCK TRANSFER & TRUST COMPANY, as Rights Agent

By:_____
Name:
Title:

EXHIBITS TO
SHAREHOLDER RIGHTS AGREEMENT

Exhibit A - Rights Certificate

Exhibit B - Summary of Rights for Dissemination to Stockholders

ALPHA INDUSTRIES, INC.
Form of Right Certificate

Certificate No. R- _____ Rights

NOT EXERCISABLE AFTER DECEMBER 5, 2006 OR EARLIER IF NOTICE OF REDEMPTION IS GIVEN. THE RIGHTS ARE SUBJECT TO REDEMPTION, AT THE OPTION OF ALPHA INDUSTRIES, INC., AT $0.01 PER RIGHT ON THE TERMS SET FORTH IN THE SHAREHOLDER RIGHTS AGREEMENT BETWEEN ALPHA INDUSTRIES, INC. AND AMERICAN STOCK TRANSFER & TRUST COMPANY, AS RIGHTS AGENT, DATED AS OF DECEMBER 5, 1996 (THE "RIGHTS AGREEMENT"). UNDER CERTAIN CIRCUMSTANCES SPECIFIED IN SECTION 7 (e) OF THE RIGHTS AGREEMENT, RIGHTS BENEFICIALLY OWNED BY AN ACQUIRING PERSON, OR AN ASSOCIATE OR AFFILIATE OF AN ACQUIRING PERSON (AS SUCH TERMS ARE DEFINED IN THE RIGHTS AGREEMENT) AND ANY SUBSEQUENT HOLDER OF SUCH RIGHTS MAY BECOME NULL AND VOID.

Right Certificate
ALPHA INDUSTRIES, INC.

This certifies that _____ , or registered assigns, is the registered owner of the number of Rights set forth above, each of which entitles the owner thereof, subject to the terms, provisions and conditions of the Shareholder Rights Agreement dated as of December 5, 1996 (the "Rights Agreement") between Alpha Industries, Inc. (the "Company") and American Stock Transfer & Trust Company, as Rights Agent (the "Rights Agent"), to purchase from the Company at any time after the Distribution Date (as such term is defined in the Rights Agreement) and prior to the close of business on December 5, 2006 at the office or offices of the Rights Agent designated for such purpose, or its successors as Rights Agent, one share of the Common Stock (the "Common Stock") of the Company, at a purchase price of $40 per share (the "Exercise Price") upon presentation and surrender of this Right Certificate with the Form of Election to Purchase and the related Certificate duly executed. The number of Rights evidenced by this Right Certificate (and the number of shares which may be purchased upon exercise thereof) set forth above, and the Exercise Price per share set forth above, are the number and Exercise Price as of December 5, 1996, based on the Common Stock as constituted at such date.

Upon the occurrence of a Section 11 (a) (ii) Event (as such term is defined in the Rights Agreement), if the Rights evidenced by this Right Certificate are beneficially owned by (i) an Acquiring Person, or an Affiliate or Associate of any such Person (as such terms are defined in the Rights Agreement), (ii) a transferee of any such Acquiring Person, Associate or

Affiliate, or (iii) under certain circumstances specified in the Rights Agreement, a transferee of a Person who, after such transfer, became an Acquiring Person or an Affiliate or Associate of an Acquiring Person, then in each such event such Rights shall become null and void and no holder hereof shall have any right with respect to such Rights from and after the occurrence of such Section 11 (a) (ii) Event.

As provided in the Rights Agreement, the Exercise Price and the number of shares of Common Stock or other securities which may be purchased upon the exercise of the Rights evidenced by this Right Certificate are subject to modification and adjustment upon the happening of certain events.

This Right Certificate is subject to all of the terms, provisions and conditions of the Rights Agreement, which terms, provisions and conditions are hereby incorporated herein by reference and made a part hereof and to which Rights Agreement reference is hereby made for a full description of the rights, limitations of rights, obligations, duties and immunities hereunder of the Rights Agent, the Company and the holders of the Right Certificates, which limitations of rights include the temporary suspension of the exercisability of such Rights under the specific circumstances set forth in the Rights Agreement. Copies of the Rights Agreement are on file at the principal office of the Company and the designated office of the Rights Agent and are also available upon written request to the Company or the Rights Agent.

Upon surrender at the office or offices of the Rights Agent designated for such purpose, this Right Certificate may be exchanged for another Right Certificate or Certificates of like tenor and date evidencing Rights entitling the holder to purchase a like aggregate number of shares of Common Stock as the Rights evidenced by the Right Certificate or Certificates surrendered shall have entitled such holder to purchase. If this Right Certificate shall be exercised in part, the holder shall be entitled to receive upon surrender hereof another Right Certificate or Certificates for the number of whole Rights not exercised. If this Right Certificate shall be exercised in whole or in part pursuant to Section 11(a) (ii) of the Rights Agreement, the holder shall be entitled to receive this Right Certificate duly marked to indicate that such exercise has occurred as set forth in the Rights Agreement.

Under certain circumstances, subject to the provisions of the Rights Agreement, the Board of Directors of the Company at its option may exchange all of any part of the Rights evidenced by this Certificate for shares of the Company's Common Stock at an exchange ratio (subject to adjustment) of one share of Common Stock per Right.

Subject to the provisions of the Rights Agreement, the Rights evidenced by this Certificate may be redeemed by the Board of Directors of the Company at its option at a redemption price of $.01 per Right (payable in cash, Common Stock or other consideration deemed appropriate by the Board of Directors).

The Company is not obligated to issue fractional shares of stock upon the exercise of any Right or Rights evidenced hereby (other than fractions which are integral multiples of one tenth of a share, which may, at the election of the Company, be evidenced by depository

receipts). If the Company elects not to issue such fractional shares, in lieu thereof a cash payment will be made, as provided in the Rights Agreement.

No holder of this Right Certificate, as such, shall be entitled to vote or receive dividends or be deemed for any purpose the holder of shares of Common Stock or any other securities of the Company which may at any time be issuable on the exercise hereof, nor shall anything contained in the Rights Agreement or herein be construed to confer upon the holder hereof, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting stockholders (except as provided in the Rights Agreement), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by this Right Certificate shall have been exercised as provided in the Rights Agreement.

This Right Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by any authorized signatory of the Rights Agent.

WITNESS the facsimile signature of the proper officers of the Company and its corporate seal.

Corporate Seal

Attested:

By: _____
Secretary or Assistant Secretary

ALPHA INDUSTRIES, INC.

By: _____
Name:
Title: Chairman,Vice Chairman, President or Vice President

Countersigned:

AMERICAN STOCK TRANSFER & TRUST COMPANY, as Rights Agent

_____
Authorized Signatory

Date of countersignature:

Form of Reverse Side of Right Certificate

FORM OF ASSIGNMENT

(To be executed by the registered holder if such holder desires to transfer the Right Certificate.)

FOR VALUE RECEIVED _____ hereby sells, assigns and transfers unto _____(Please print name and address of transferred) _____ this Right Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ Attorney, to transfer the within Right Certificate on the books of the within-named Company, with full power of substitution.

Dated: _____, ____.

_____
Signature

Signature Guaranteed: _____

CERTIFICATE

The undersigned hereby certifies by checking the appropriate boxes that:

(1) the Rights evidenced by this Right Certificate _____ are _____ are not being transferred by or on behalf of the Person who is or was an Acquiring Person or an Affiliate or Associate of any such Person (as such terms are defined in the Rights Agreement); and

(2) after due inquiry and to the best knowledge of the undersigned, the undersigned ___ did ___ did not directly or indirectly acquire the Rights evidenced by the Right Certificate from any Person who is, was or became an Acquiring Person or an Affiliate or Associate of any such Person.

Dated: _____, ___ _____
Signature

NOTICE

The signature to the foregoing Assignment and Certificate must correspond to the name as written upon the face of this Right Certificate in every particular, without alteration or enlargement or any change whatsoever.

FORM OF ELECTION TO PURCHASE

(To be executed if holder desires to exercise the Right Certificate.)

To: Alpha Industries, Inc.:

The undersigned hereby irrevocably elects to exercise _____ Rights represented by this Right Certificate to purchase the shares of Common Stock issuable upon the exercise of the Rights (or such other securities of the Company or of any other person which may be issuable upon the exercise of the Rights) and requests that certificates for such shares be issued in the name of:

Please insert social security
or other identifying taxpayer number: _____

(Please print name and address)

If such number of Rights shall not be all the Rights evidences by this Right Certificate or if the Rights are being exercised pursuant to Section 11(a)(ii) of the Rights Agreement, a new Right Certificate for the balance of such Rights shall be registered in the name of and delivered to:

Please insert social security
or other identifying taxpayer number: _____

(Please print name and address)

Dated: _____, ____

_____
Signature

Signature Guaranteed:_____

CERTIFICATE

The undersigned hereby certifies by checking the appropriate boxes that:

(1) the Rights evidenced by this Right Certificate _____ are _____ are not being exercised by or on behalf of a Person who is or was an Acquiring Person or an Affiliate or Associate of any such Person (as such terms are defined in the Rights Agreement); and

(2) after due inquiry and to the best knowledge of the undersigned, the undersigned ___ did ___ did not directly or indirectly acquire the Rights evidenced by this Right Certificate from any person who is, was or became an Acquiring Person or an Affiliate or Associate of any such person.

Dated: _____, ____ _____
Signature

NOTICE

The signature to the foregoing Election to Purchase and Certificate must correspond to the name as written upon the face of this Right Certificate in every particular, without alteration or enlargement or any change whatsoever.

COMPANY LETTERHEAD

To Our Stockholders:

On December 5, 1996 your Board of Directors adopted a Common Stock Rights Plan and declared a dividend distribution of Common Stock Purchase Rights. This Plan replaces the rights plan originally adopted in 1986 which expires on December 5, 1996. This letter describes the new Rights Plan and the Board's reasons for adopting it. As described below, the Board of Directors will submit the new Rights Plan to stockholders for approval.

The Rights approved today are substantially similar to the rights which have been in place for the last ten years. These new Rights contain provisions to protect stockholders in the event of an unsolicited attempt to acquire the Company, including a gradual accumulation of shares in the open market, a partial or two-tier tender offer that does not treat all stockholders equally, a squeeze-out merger, or other abusive takeover tactics which the Board believes are not in the best interests of stockholders. These tactics unfairly pressure stockholders, squeeze them out of their investment without giving them any real choice and deprive them of the full value of their shares.

Over 1,600 companies, including over 60% of the companies in the Fortune 500, have adopted rights plans in order to protect their stockholders against these tactics. We consider the Rights to be the best available means of protecting both your right to retain your equity investment in the Company and the full value of that investment, while not foreclosing a fair acquisition bid for the Company.

The Rights are not intended to prevent a takeover of the Company and will not do so. However, they should deter any attempt to acquire the Company in a manner or on terms not approved by the Board. They are designed to deal with the very serious problem of another person or company using abusive tactics to deprive the Company's Board of Directors and its stockholders of any real opportunity to determine the destiny of the Company.

Because the Rights may be terminated or amended by the Board of Directors at any time prior to an actual threat to the Company materializing, they should not interfere with any merger or business combination approved by the Board of Directors prior to that time.

Like the existing rights which are about to expire, these new Rights do not in any way weaken the financial strength of the Company or interfere with its business plans. The issuance of the Rights has no dilutive effect, will not affect reported earnings per share, is not taxable to the Company or to you, and will not change the way in which you can presently trade the Company's shares. The Rights will only become exercisable after the "Distribution Date" described in the attached Summary of Common Stock Purchase Rights, and will then operate to protect you against being deprived of your right to share in the full measure of your Company's long-term potential.

Your Board of Directors was aware when it acted that some commentators have argued that rights plans deter legitimate acquisition proposals. We carefully considered these views and concluded that, on balance, the arguments do not justify leaving stockholders without any protection against unfair treatment by an acquiror -- who, after all, is seeking his own advantage, not yours. However, because the Board is sensitive to the objections which have been raised to adoption of rights plans, it has determined to submit the Rights Plan to stockholders for their approval at the Company's next annual meeting. If the stockholders do not approve the Rights Plan, it will terminate as of the date of the annual meeting. Your Board believes that these Rights represent a reasonable and balanced means of addressing the complex issues of corporate policy created by the current takeover environment.

The distribution of the Rights will not be taxable to you or the Company. Stockholders may recognize taxable income upon the occurrence or certain subsequent events. At no time will the Rights have any voting power.

You should review and retain for your records the attached Summary of Common Stock Purchase Rights describing the Rights in more detail.

In declaring the Rights dividend, we have expressed our confidence in the Company's future and our determination that you, our stockholders, be given every opportunity to participate fully in that future.

On behalf of the Board of Directors

SUMMARY OF RIGHTS TO PURCHASE
COMMON STOCK

On December 4, 1996, the Board of Directors of Alpha Industries, Inc. (the "Company") declared a dividend of one common stock purchase right (a "Right") for each outstanding share of common stock, par value $0.25 per share (the "Common Stock"), of the Company. The dividend is payable at the close of business on December 5, 1996 to all holders of record of Common Stock as of the close of business on December 5, 1996 (the "Record Date"). Each Right entitles the registered holder to purchase from the Company one share of Common Stock of the Company at a price of $40 per share (the "Purchase Price"), subject to adjustment. The description and terms of the rights are set forth in a Shareholder Rights Agreement (the "Rights Agreement") between the Company and American Stock Transfer & Trust Company, New York, New York, as Rights Agent (the "Rights Agent").

The Rights are not exercisable until the Distribution Date. The Distribution Date is defined as the earlier to occur of (i) 10 days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired beneficial ownership of 10% or more of the outstanding Common Stock, or (ii) 10 business days (or such later date as may be determined by action of the Board of Directors prior to such time as any person or group of affiliated persons becomes an Acquiring Person) following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 10% or more of the outstanding Common Stock.

Until the Distribution Date (or earlier redemption or expiration of the Rights) (i) the Rights will be evidenced by the certificates representing Common Stock with a copy of this Summary of Rights attached thereto, (ii) the Rights will be transferred with and only with the Common Stock, (iii) new Common Stock certificates issued after the Record Date upon transfer or new issuance of Common Stock will contain a notation incorporating the Rights Agreement by reference, and (iv) the surrender for transfer of any certificates for Common Stock outstanding as of the Record Date, even without such notation or a copy of this Summary of Rights being attached thereto, will also constitute the transfer of the Rights associated with the Common Stock represented by the stock certificate.

As soon as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to holders of record of the Common Stock as of the close of business on the Distribution Date, and thereafter the separate Right Certificates alone will evidence the Rights.

In the event that any person or group of affiliated or associated persons becomes an Acquiring Person, proper provision must be made so that after the Distribution Date each holder of a Right (other than Rights beneficially owned by the Acquiring Person or the affiliates and associates of such Acquiring Persons, which will thereafter be void) will have the right to acquire that number of shares of Common Stock at the then current Purchase Price of

the Right which at that time have a market value of two times the Purchase Price of the Right. (This is sometimes referred to as a "flip-in".) For example, at a Purchase Price of $40, each Right would entitle its holder to purchase for $40 the number of shares of Common Stock as equals $40 divided by one half the market price of the Company's Common Stock. If the Common Stock were trading at $10 share, each Right would entitle the holder to purchase 8 shares.

In the event that after the Distribution Date the Company is acquired in a merger or other business combination transaction or 50% or more of its consolidated assets or earning power are sold after a person or group has become an Acquiring Person, proper provision will be made so that each holder of a Right (other than an Acquiring Person and the affiliates and associates or such Acquiring Person, whose Rights will have become void) will thereafter have the right to receive, upon the exercise thereof at the then current Purchase Price of the Right, that number of shares of common stock of the acquiring company which at the time of that transaction will have a market value of two times the Purchase Price of the Right. (This is sometimes referred to as a "flip-over".) For example, at a Purchase Price of $40, each Right (other than those owned by an Acquiring Person or its affiliates or associates, which will be void) will entitle its holder to purchase for $40 that number of shares of stock of the acquiring company having a market value of $80.

The Rights will expire on December 5, 2006 (the "Final Expiration Date"), unless the Final Expiration Date is extended or unless the Rights are earlier redeemed or exchanged by the Company, in each case, as described below; provided, however, the Rights and the Rights Agreement will terminate on the date of the next annual meeting of stockholders of the Company following the date of the Rights Agreement if at that meeting, the stockholders do not approve the Rights Agreement.

At any time after any person or group becomes an Acquiring Person and prior to the acquisition by the Acquiring Person of 50% or more of the outstanding Common Stock, the Board of Directors of the Company may exchange the Rights (other than Rights owned by the Acquiring Person and affiliates and associates of the Acquiring Person, which will have become void) in whole or in part, at an exchange ratio of one share of Common Stock per Right (subject to adjustment).

At any time prior to or within 10 business days following the acquisition by an Acquiring Person of beneficial ownership of 10% or more of the outstanding Common Stock, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of $.01 per Right (the "Redemption Price"). The redemption of the Rights may be made effective at such time on such basis with such conditions as the Board of Directors in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

The Purchase Price payable, and the number of Common Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to

prevent dilution (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Common Stock, (ii) upon the grant to holders of the Common Stock of certain rights or warrants to subscribe for or purchase Common Stock at a price, or securities convertible into Common Stock with a conversion price, less than the then-current market price of the Common Stock, or (iii) upon the distribution to holders of the Common Stock of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in Common Stock) or of subscription rights or warrants (other than those referred to above).

The number of outstanding Rights and the number of shares of Common Stock issuable upon exercise of each Right are also subject to adjustment in the event of a stock split of the Common Stock, a stock dividend on the Common Stock payable in Common Stock or a subdivision, consolidation or combination of the Common Stock occurring prior to the Distribution Date.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least 1% in such Purchase Price. No fractional Common Stock will be issued (other than fractions which are integral multiples of one one-tenth of a share, which may, at the election of the Company, be evidenced by depository receipts) and in lieu thereof, an adjustment in cash will be made based on the market price of the Common Stock on the last trading day prior to the date of exercise.

Pursuant to the Rights Agreement, certain actions (e.g. redeeming outstanding Rights, amending the Rights Agreement, etc.) may only be made with the approval of the Board of Directors of the Company.

Exhibit (4)(f)

THIRD AMENDMENT TO CREDIT AGREEMENT

Dated as of June 12, 1997

Alpha Industries, Inc.
20 Sylvan Road
Woburn, MA 01801

Trans-Tech, Inc.
5520 Adamstown Road
Adamstown, MD

Re: Third Amendment to the Credit Agreement dated as of September 29, 1995 by and among Alpha Industries, Inc. ("Alpha"), Trans-Tech, Inc. ("Trans-Tech"), Silicon Valley Bank ("SVB"), Fleet Bank of Massachusetts, N.A., predecessor to Fleet National Bank ("Fleet"), and Silicon Valley Bank as collateral agent for SVB and Fleet (the "Collateral Agent"), as previously amended by the First Amendment to Credit Agreement dated as of July 31, 1996 and the Second Amendment to Credit Agreement dated as of September 30, 1996.

Ladies and Gentlemen:

The purpose of this letter is to evidence the agreement between Alpha and Trans-Tech (each a "Borrower" and, together, the "Borrowers" or "you"), SVB and Fleet (each a "Bank" and, together, the "Banks") and the Collateral Agent that, effective on the Effective Date (as defined below), the above-referenced Credit Agreement (together with the schedules thereto, the "Credit Agreement") is amended, and certain existing defaults thereunder are waived, all as set forth on Annex I hereto (which is incorporated in this letter amendment by reference). Capitalized terms used but not defined herein shall have the meanings assigned to them in the Credit Agreement.

This letter amendment (the "Amendment") shall become effective as of June 12, 1997 (the "Effective Date"), provided that SVB, on behalf of the Banks, shall have received the following on or before June 30, 1997 and provided further, however, in no event shall this Amendment become effective until signed by an officer of SVB in California:

(i) three copies of this letter, duly executed by each of you, with the attached consent of Alpha Securities Corp. (the "Guarantor"), duly executed thereby; and

(ii) two amended and restated promissory notes in the forms enclosed herewith (the "Amended and Restated Notes"), duly executed by each of you.

By your signatures below, you are hereby representing that your representations set forth in the Loan Documents (including those contained in the Credit Agreement, as amended hereby) are true and correct as of the date hereof as if made on and as of the date hereof. In addition, Alpha confirms its grant of authorization, in connection with this transaction, (A) to SVB to debit Alpha's account with SVB by $3,500 in payment of SVB's extension fee and by $3,000 in payment of SVB's waiver and amendment fee and (B) to Fleet to debit Alpha's account with Fleet by $2,333 in payment of Fleet's extension fee relating to the Working Capital Line of Credit, by $2,000 in

payment of Fleet's waiver and amendment fee relating to the Working Capital Line of Credit and by $3,000 in payment of Fleet's amendment fee relating to the Equipment Line of Credit. Finally, each of you and the Guarantor agrees that, as of this date, it has no defenses against its obligations to pay any amounts due under the Credit Agreement and the other Loan Documents.

Upon the effectiveness hereof, each reference in each Security Instrument or other Loan Document to "the Credit Agreement", "thereunder", "thereof", "therein", or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement as amended hereby. Except as specifically set forth above, the Credit Agreement shall remain in full force and effect and is hereby ratified and confirmed. Each of the other Loan Documents is in full force and effect and is hereby ratified and confirmed. The amendments and waivers set forth above (a) do not constitute a waiver or modification of any term, condition or covenant of the Credit Agreement or any other Loan Document, other than as expressly set forth herein, and (b) shall not prejudice any rights which the Banks may now or hereafter have under or in connection with the Credit Agreement, as modified hereby, or the other Loan Documents.

You agree to pay on demand all costs and expenses of the Banks in connection with the preparation, reproduction, execution and delivery of this letter amendment and the other instruments and documents to be delivered hereunder, including, without limitation, the reasonable fees and out-of-pocket expenses of Sullivan & Worcester LLP, special counsel for the Banks with respect thereto.

This letter amendment may be signed in one or more counterparts each of which taken together shall constitute one and the same instrument.

THIS LETTER AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS.

[remainder of page blank]

If you are in agreement with the foregoing, please sign and return the enclosed copy of this letter amendment no later than June 30, 1997.

Sincerely,

SILICON VALLEY EAST, a Division of Silicon Valley Bank, as a Bank hereunder and as Collateral Agent

By:_____
Name:
Title:

SILICON VALLEY BANK, as a Bank hereunder and as Collateral Agent

By:_____
Name:
Title:
(signed in Santa Clara, California)

FLEET NATIONAL BANK, successor to Fleet Bank of Massachusetts, N.A., as a Bank hereunder

By:_____
Name:
Title:

The undersigned have reviewed and accept and agree to the terms of the foregoing (including the attached Annex I):

ALPHA INDUSTRIES, INC.

By:_____

Name:_____

Title:_____

Date:_____

TRANS-TECH, INC.

By:___________________________

Name:________________________

Title:_________________________

Date:_________________________

ANNEX I TO LETTER AMENDMENT

Effective as of the Effective Date and subject to the conditions set forth in the foregoing letter amendment, the Credit Agreement is hereby amended, and the Banks hereby waive certain existing defaults thereunder, as follows:

A. Amendments to Credit Agreement.

1. The date "August 1, 1997" appearing in Section 1.1 is deleted and the date "October 1, 1997" is substituted in lieu thereof.

2. The phrase "80% of all Eligible Domestic Accounts Receivable" appearing in clause (ii) of Section 1.5 is deleted and there is substituted in lieu thereof the phrase "75% of all Eligible Domestic Accounts Receivable".

3. The date "August 1, 1997" appearing in Section 1.6 is deleted and the date "October 1, 1997" is substituted in lieu thereof.

4. Section 3.1(a)(i) is amended and restated in its entirety as follows:

"(i) for Prime Rate Loans, at the Prime Rate per annum, plus 1.0% per annum."

5. The first sentence of Section 7.9 ("Use of Proceeds") is amended and restated in its entirety as follows:

"The Borrowers shall use the proceeds of the borrowings under the Working Capital Notes for the working capital purposes of the Borrowers, including the purchase of equipment."

6. Section 8.11 is amended and restated in its entirety as follows:

"8.11 Quick Ratio. The Borrowers will not permit the Quick Ratio to be less than (a) 1.00 to 1 at the end of the fiscal quarters ending June 30, 1997 or September 30, 1997 or (b) 1.20 to 1 at the end of the fiscal quarter ending December 31, 1997 or thereafter."

7. Section 8.14 is amended and restated in its entirety as follows:

"8.14 Tangible Net Worth. The Borrowers will not permit Tangible Net Worth at the end of any fiscal quarter ending June 30, 1997 or thereafter to be less than 42,500,000."

B. Waiver of Certain Existing Defaults.

The Banks and the Borrowers acknowledge and agree that certain Events of Default (the "Existing Defaults") have occurred and currently exist with respect to the financial covenants set forth in Section 8.14 of the Credit Agreement as in effect prior to the effectiveness of this Amendment with respect to the fiscal quarter ended March 30, 1997. The Banks hereby waive, effective upon the Effective Date, the Existing Defaults, provided that this waiver shall in no event be deemed to constitute a waiver with respect to any fiscal period other than the fiscal period ended March 30, 1997 or with respect to any covenants other than the financial covenants expressly identified in the first sentence of this paragraph.

CONSENT

The undersigned, as Guarantor under the Subsidiary Guaranty dated as of September 29, 1995 (the "Guaranty") in favor of Silicon Valley Bank and Fleet National Bank (successor to Fleet Bank of Massachusetts, N.A.), hereby consents to the foregoing letter amendment and to the amendment and restatement of the two Working Capital Notes dated as of September 29, 1995 effected in connection therewith and hereby confirms and agrees that the Guaranty is, and shall continue to be, in full force and effect and is hereby ratified and confirmed in all respects, except that, upon the effectiveness of, and on and after the date of, said letter amendment, each reference in the Guaranty and in each other Loan Document (as defined in the Credit Agreement) to which the undersigned is a party, including, without limitation, the Security Agreement dated as of September 29, 1995 to which the Guarantor is a party, to "the Credit Agreement", "thereunder", "thereof", "therein", or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement, as amended thereby, and that each reference, by whatever terms, in the aforesaid Loan Documents to the Working Capital Notes shall mean and be a reference to the Working Capital Notes as amended and restated in connection therewith.

ALPHA SECURITIES CORP.

By:_____
Name:
Title:

AMENDED AND RESTATED PROMISSORY NOTE
(Working Capital Line of Credit Loans)

$4,500,000 Woburn, Massachusetts
June 12, 1997
(Originally dated as
of September 29, 1995)

For value received, the undersigned, ALPHA INDUSTRIES, INC., a Delaware corporation, and TRANS-TECH, INC., a Maryland corporation (each a "Borrower" and collectively the "Borrowers"), jointly and severally promise to pay to SILICON VALLEY BANK (the "Bank") at the office of the Bank located at 3003 Tasman Drive, Santa Clara, California 95054, or to its order, the lesser of FOUR MILLION FIVE HUNDRED THOUSAND DOLLARS ($4,500,000) or the outstanding principal amount hereunder, on October 1, 1997 (the "Maturity Date"), together with interest on the principal amount hereof from time to time outstanding at a fluctuating rate per annum equal to the Prime Rate (as defined below) plus one percent (1%) until the Maturity Date, payable monthly in arrears on the first day of each calendar month occurring after the date hereof and on the Maturity Date. The Bank's "Prime Rate" is the per annum rate of interest from time to time announced and made effective by the Bank as its Prime Rate (which rate may or may not be the lowest rate available from the Bank at any given time).

Computations of interest shall be made by the Bank on the basis of a year of 360 days for the actual number of days occurring in the period for which such interest is payable.

This promissory note amends and restates the terms and conditions of the obligations of the Borrowers under the promissory note dated September 29, 1995 (the "Original Note") by the Borrowers to the Bank. Nothing contained in this promissory note shall be deemed to create or represent the issuance of new indebtedness or the exchange by the Borrowers of the Original Note for a new promissory note. This promissory note is referred to in the credit agreement dated September 29, 1995, as amended by amendments dated as of July 31, 1996, September 30, 1996 and June 12, 1997, by the Bank and accepted by the Borrowers together with all related schedules, as the same may be amended, modified or supplemented from time to time (the "Credit Agreement"), and is subject to optional and mandatory prepayment as provided therein, and is entitled to the benefits thereof and of the other Loan Documents referred to therein. This note is secured by a Security Agreement and a Pledge Agreement, both dated as of September 29, 1995, by Alpha Industries, Inc., and a Guarantee dated as of September 29, 1995 of Alpha Securities Corp., a Massachusetts corporation, as the same may be amended, modified or supplemented from time to time.

Each reference in each Loan Document (as defined in the Credit Agreement) to "the Note", "thereof", "therein", "thereunder", or words of like import referring to the Original Note, shall mean and be a reference to the Original Note, as amended and restated hereby.

Upon the occurrence of any Event of Default under, and as defined in, the Credit Agreement, at the option of the Bank, the principal amount then outstanding of and the accrued interest on the advances under this note and all other amounts payable under this note shall become immediately due and payable, without notice (including, without limitation, notice of intent

to accelerate), presentment, demand, protest or other formalities of any kind, all of which are hereby expressly waived by the Borrowers.

The Bank shall keep a record of the amount and the date of the making of each advance pursuant to the Credit Agreement and each payment of principal with respect thereto by maintaining a computerized record of such information and printouts of such computerized record, which computerized record, and the printouts thereof, shall constitute prima facie evidence of the accuracy of the information so endorsed.

Each of the undersigned agrees to pay all reasonable costs and expenses of the Bank (including, without limitation, the reasonable fees and expenses of attorneys) in connection with the enforcement of this note and the other Loan Documents and the preservation of its rights hereunder and thereunder.

No delay or omission on the part of the Bank in exercising any right hereunder shall operate as a waiver of such right or of any other right of the Bank, nor shall any delay, omission or waiver on any one occasion be deemed a bar to or waiver of the same or any other right on any future occasion. The Borrowers and every endorser or guarantor of this note regardless of the time, order or place of signing waives presentment, demand, protest and notices of every kind and assents to any one or more extensions or postponements of the time of payment or any other indulgences, to any substitutions, exchanges or releases of collateral for this note, and to the additions or releases of any other parties or persons primarily or secondarily liable.

THIS NOTE HAS BEEN DELIVERED TO THE BANK AND ACCEPTED BY THE BANK IN THE STATE OF CALIFORNIA.

THE BORROWERS HEREBY EXPRESSLY WAIVE ANY RIGHT THEY MAY NOW OR HEREAFTER HAVE TO A JURY TRIAL IN ANY SUIT, ACTION OR PROCEEDING WHICH ARISES OUT OF OR BY REASON OF THIS NOTE, ANY LOAN DOCUMENT (AS DEFINED IN THE CREDIT AGREEMENT), OR THE TRANSACTIONS CONTEMPLATED HEREBY.

BY ITS EXECUTION AND DELIVERY OF THIS NOTE, EACH BORROWER ACCEPTS FOR ITSELF AND IN CONNECTION WITH ITS PROPERTIES, GENERALLY AND UNCONDITIONALLY, THE NON-EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT OF COMPETENT JURISDICTION IN THE COMMONWEALTH OF MASSACHUSETTS (OR IF FOR ANY REASON ACCESS TO SUCH COURTS IS DENIED TO THE BANK, THEN, IN THE STATE OF CALIFORNIA) IN ANY ACTION, SUIT OR PROCEEDING OF ANY KIND AGAINST IT WHICH ARISES OUT OF OR BY REASON OF THIS NOTE, ANY LOAN DOCUMENT (AS DEFINED IN THE CREDIT AGREEMENT), OR THE TRANSACTIONS CONTEMPLATED HEREBY, IN ADDITION TO ANY OTHER COURT IN WHICH SUCH ACTION, SUIT OR PROCEEDING MAY BE BROUGHT, IRREVOCABLY AGREES TO BE BOUND BY ANY FINAL JUDGMENT RENDERED BY ANY SUCH COURT IN ANY SUCH ACTION, SUIT OR PROCEEDING IN WHICH IT SHALL HAVE BEEN SERVED WITH PROCESS IN THE MANNER HEREINAFTER PROVIDED, SUBJECT TO EXERCISE AND EXHAUSTION OF ALL RIGHTS OF APPEAL AND TO THE EXTENT THAT IT MAY LAWFULLY DO SO, WAIVES AND AGREES NOT TO ASSERT, BY WAY OF MOTION, AS A DEFENSE OR OTHERWISE, IN SUCH ACTION, SUIT OR PROCEEDING ANY CLAIMS THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF SUCH COURT, THAT ITS PROPERTY IS EXEMPT OR IMMUNE FROM ATTACHMENT OR EXECUTION, THAT THE ACTION, SUIT OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE THEREOF IS IMPROPER, AND AGREES THAT PROCESS MAY BE SERVED UPON IT IN ANY SUCH ACTION, SUIT OR PROCEEDING IN THE MANNER PROVIDED BY CHAPTER 223A OF THE GENERAL LAWS OF MASSACHUSETTS, RULE 4 OF THE MASSACHUSETTS RULES OF CIVIL PROCEDURE OR RULE 4 OF THE FEDERAL RULES OF CIVIL PROCEDURE.

(remainder of page blank)

ALL RIGHTS AND OBLIGATIONS HEREUNDER SHALL BE GOVERNED BY THE LAW OF THE COMMONWEALTH OF MASSACHUSETTS AND THIS NOTE SHALL BE DEEMED TO BE UNDER SEAL.

Attest:

- ----------

Name:
Title:

[Seal]

ALPHA INDUSTRIES, INC.

By:

Name:
Title:

Attest:

- ----------

Name:
Title:

[Seal]

TRANS-TECH, INC.

By:

Name:
Title:

Accepted and Agreed
as of June 12, 1997:

SILICON VALLEY BANK

By:

Name:
Title:

AMENDED AND RESTATED PROMISSORY NOTE
(Working Capital Line of Credit Loans)

$3,000,000

Woburn, Massachusetts
June 12, 1997
(Originally dated as
of September 29, 1995)

For value received, the undersigned, ALPHA INDUSTRIES, INC., a Delaware corporation, and TRANS-TECH, INC., a Maryland corporation (each a "Borrower" and collectively the "Borrowers"), jointly and severally promise to pay to FLEET NATIONAL BANK, successor in interest to Fleet Bank of Massachusetts, N.A. (the "Bank"), at the office of the Bank located at 75 State Street, Boston, Massachusetts 02106, or to its order, the lesser of THREE MILLION DOLLARS ($3,000,000) or the outstanding principal amount hereunder, on October 1, 1997 (the "Maturity Date"), together with interest on the principal amount hereof from time to time outstanding at a fluctuating rate per annum equal to the Prime Rate (as defined below) plus one percent (1%) until the Maturity Date, payable monthly in arrears on the first day of each calendar month occurring after the date hereof and on the Maturity Date. The Bank's "Prime Rate" is the per annum rate of interest from time to time announced and made effective by the Bank as its Prime Rate (which rate may or may not be the lowest rate available from the Bank at any given time).

Computations of interest shall be made by the Bank on the basis of a year of 360 days for the actual number of days occurring in the period for which such interest is payable.

This promissory note amends and restates the terms and conditions of the obligations of the Borrowers under the promissory note dated September 29, 1995 (the "Original Note") by the Borrowers to the Bank. Nothing contained in this promissory note shall be deemed to create or represent the issuance of new indebtedness or the exchange by the Borrowers of the Original Note for a new promissory note. This promissory note is referred to in the credit agreement dated September 29, 1995, as amended by amendments dated as of July 31, 1996, September 30, 1996 and June 12, 1997, by the Bank and accepted by the Borrowers together with all related schedules, as the same may be amended, modified or supplemented from time to time (the "Credit Agreement"), and is subject to optional and mandatory prepayment as provided therein, and is entitled to the benefits thereof and of the other Loan Documents referred to therein. This note is secured by a Security Agreement and a Pledge Agreement, both dated as of September 29, 1995, by Alpha Industries, Inc., and a Guarantee dated as of September 29, 1995 of Alpha Securities Corp., a Massachusetts corporation, as the same may be amended, modified or supplemented from time to time.

Each reference in each Loan Document (as defined in the Credit Agreement) to "the Note", "thereof", "therein", "thereunder", or words of like import referring to the Original Note, shall mean and be a reference to the Original Note, as amended and restated hereby.

Upon the occurrence of any Event of Default under, and as defined in, the Credit Agreement, at the option of the Bank, the principal amount then outstanding of and the accrued interest on the advances under this note and all other amounts payable under this note shall become immediately due and payable, without notice (including, without limitation, notice of intent

to accelerate), presentment, demand, protest or other formalities of any kind, all of which are hereby expressly waived by the Borrowers.

The Bank shall keep a record of the amount and the date of the making of each advance pursuant to the Credit Agreement and each payment of principal with respect thereto by maintaining a computerized record of such information and printouts of such computerized record, which computerized record, and the printouts thereof, shall constitute prima facie evidence of the accuracy of the information so endorsed.

Each of the undersigned agrees to pay all reasonable costs and expenses of the Bank (including, without limitation, the reasonable fees and expenses of attorneys) in connection with the enforcement of this note and the other Loan Documents and the preservation of its rights hereunder and thereunder.

No delay or omission on the part of the Bank in exercising any right hereunder shall operate as a waiver of such right or of any other right of the Bank, nor shall any delay, omission or waiver on any one occasion be deemed a bar to or waiver of the same or any other right on any future occasion. The Borrowers and every endorser or guarantor of this note regardless of the time, order or place of signing waives presentment, demand, protest and notices of every kind and assents to any one or more extensions or postponements of the time of payment or any other indulgences, to any substitutions, exchanges or releases of collateral for this note, and to the additions or releases of any other parties or persons primarily or secondarily liable.

THIS NOTE HAS BEEN DELIVERED TO THE BANK AND ACCEPTED BY THE BANK IN THE STATE OF CALIFORNIA.

THE BORROWERS HEREBY EXPRESSLY WAIVE ANY RIGHT THEY MAY NOW OR HEREAFTER HAVE TO A JURY TRIAL IN ANY SUIT, ACTION OR PROCEEDING WHICH ARISES OUT OF OR BY REASON OF THIS NOTE, ANY LOAN DOCUMENT (AS DEFINED IN THE CREDIT AGREEMENT), OR THE TRANSACTIONS CONTEMPLATED HEREBY.

BY ITS EXECUTION AND DELIVERY OF THIS NOTE, EACH BORROWER ACCEPTS FOR ITSELF AND IN CONNECTION WITH ITS PROPERTIES, GENERALLY AND UNCONDITIONALLY, THE NON-EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT OF COMPETENT JURISDICTION IN THE COMMONWEALTH OF MASSACHUSETTS (OR IF FOR ANY REASON ACCESS TO SUCH COURTS IS DENIED TO THE BANK, THEN, IN THE STATE OF CALIFORNIA) IN ANY ACTION, SUIT OR PROCEEDING OF ANY KIND AGAINST IT WHICH ARISES OUT OF OR BY REASON OF THIS NOTE, ANY LOAN DOCUMENT (AS DEFINED IN THE CREDIT AGREEMENT), OR THE TRANSACTIONS CONTEMPLATED HEREBY, IN ADDITION TO ANY OTHER COURT IN WHICH SUCH ACTION, SUIT OR PROCEEDING MAY BE BROUGHT, IRREVOCABLY AGREES TO BE BOUND BY ANY FINAL JUDGMENT RENDERED BY ANY SUCH COURT IN ANY SUCH ACTION, SUIT OR PROCEEDING IN WHICH IT SHALL HAVE BEEN SERVED WITH PROCESS IN THE MANNER HEREINAFTER PROVIDED, SUBJECT TO EXERCISE AND EXHAUSTION OF ALL RIGHTS OF APPEAL AND TO THE EXTENT THAT IT MAY LAWFULLY DO SO, WAIVES AND AGREES NOT TO ASSERT, BY WAY OF MOTION, AS A DEFENSE OR OTHERWISE, IN SUCH ACTION, SUIT OR PROCEEDING ANY CLAIMS THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF SUCH COURT, THAT ITS PROPERTY IS EXEMPT OR IMMUNE FROM ATTACHMENT OR EXECUTION, THAT THE ACTION, SUIT OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE THEREOF IS IMPROPER, AND AGREES THAT PROCESS MAY BE SERVED UPON IT IN ANY SUCH ACTION, SUIT OR PROCEEDING IN THE MANNER PROVIDED BY CHAPTER 223A OF THE GENERAL LAWS OF MASSACHUSETTS, RULE 4 OF THE MASSACHUSETTS RULES OF CIVIL PROCEDURE OR RULE 4 OF THE FEDERAL RULES OF CIVIL PROCEDURE.

(remainder of page blank)

ALL RIGHTS AND OBLIGATIONS HEREUNDER SHALL BE GOVERNED BY THE LAW OF THE COMMONWEALTH OF MASSACHUSETTS AND THIS NOTE SHALL BE DEEMED TO BE UNDER SEAL.

Attest:

_____
Name:
Title:

ALPHA INDUSTRIES, INC.

By:_____
Name:
Title:

[Seal]

Attest:

_____
Name:
Title:

TRANS-TECH, INC.

By:_____
Name:
Title:

[Seal]

Accepted and Agreed
as of June 12, 1997:

FLEET NATIONAL BANK, successor
to Fleet Bank of Massachusetts, N.A.

By:_____
Name:
Title:

SECOND AMENDMENT TO CREDIT AGREEMENT

Dated as of September 30, 1996

Alpha Industries, Inc.
20 Sylvan Road
Woburn, MA 01801

Trans-Tech, Inc.
5520 Adamstown Road
Adamstown, MD

Re: Second Amendment to the Credit Agreement dated as of September 29, 1995 by and among Alpha Industries, Inc. ("Alpha"), Trans-Tech, Inc. ("Trans-Tech"), Silicon Valley Bank ("SVB"), Fleet Bank of Massachusetts, N.A., predecessor to Fleet National Bank ("Fleet"), and Silicon Valley Bank as collateral agent for SVB and Fleet (the "Collateral Agent"), as previously amended by the First Amendment to Credit Agreement dated as of July 31, 1996

Ladies and Gentlemen:

The purpose of this letter is to evidence the agreement between Alpha and Trans-Tech (each a "Borrower" and, together, the "Borrowers" or "you"), SVB and Fleet (each a "Bank" and, together, the "Banks") and the Collateral Agent that, effective on the Effective Date (as defined below), the above-referenced Credit Agreement (as previously amended and together with the schedules thereto, the "Credit Agreement") is amended as set forth on Annex I hereto (which is incorporated in this letter amendment by reference). Capitalized terms used but not defined herein shall have the meanings assigned to them in the Credit Agreement.

This letter amendment (the "Amendment") shall become effective as of September 30, 1996 (the "Effective Date"), provided that SVB, on behalf of the Banks, shall have received on or before December 23, 1996 three (3) copies of this letter, duly executed by each of you, with the attached consent of Alpha Securities Corp. (the "Guarantor"), duly executed thereby, and provided, further, however, that in no event shall this Amendment become effective until signed by an officer of SVB in California.

By your signatures below, you are hereby representing that your representations set forth in the Loan Documents (including those contained in the Credit Agreement, as amended hereby) are true and correct as of the date hereof as if made on and as of the date hereof. In addition, each of you and the Guarantor agrees that, as of this date, it has no defenses against its obligations to pay any amounts due under the Credit Agreement and the other Loan Documents.

Upon the effectiveness hereof, each reference in each Security Instrument or other Loan Document to "the Credit Agreement", "thereunder", "thereof", "therein", or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement as amended hereby. Except as specifically set forth above, the Credit Agreement shall remain in full force and effect and is hereby ratified and confirmed. Each of the other Loan Documents is in full force and effect and is hereby ratified and confirmed. The amendments set forth herein (a) do not

constitute a waiver or modification of any term, condition or covenant of the Credit Agreement or any other Loan Document, other than as expressly set forth herein, and (b) shall not prejudice any rights which the Banks may now or hereafter have under or in connection with the Credit Agreement, as modified hereby, or the other Loan Documents.

You agree to pay on demand all costs and expenses of the Banks in connection with the preparation, reproduction, execution and delivery of this letter amendment and the other instruments and documents to be delivered hereunder, including, without limitation, the reasonable fees and out-of-pocket expenses of Sullivan & Worcester LLP, special counsel for the Banks with respect thereto.

This letter amendment may be signed in one or more counterparts each of which taken together shall constitute one and the same instrument.

THIS LETTER AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS.

If you are in agreement with the foregoing, please sign and return the enclosed copy of this letter amendment no later than December 23, 1996.

Sincerely,

SILICON VALLEY EAST, a Division of Silicon Valley Bank, as a Bank hereunder and as Collateral Agent

By:_____
Name:
Title:

SILICON VALLEY BANK, as a Bank hereunder and as Collateral Agent

By:_____
Name:
Title:
(signed in Santa Clara, California)

FLEET NATIONAL BANK, successor to Fleet Bank of Massachusetts, N.A., as a Bank hereunder

By:_____
Name:
Title:

The undersigned have reviewed and accept and agree to the terms of the foregoing (including the attached Annex I):

ALPHA INDUSTRIES, INC.

By:_____

Name:_____

Title:_____

Date:_____

TRANS-TECH, INC.

By:_____

Name:_____

Title:_____

Date:_____

ANNEX I TO LETTER AMENDMENT

Effective as of the Effective Date and subject to the conditions set forth in the foregoing letter amendment, the Credit Agreement is hereby amended as follows:

1. Section 1.5 is amended by deleting clause (ii) thereof and substituting in lieu thereof the following:

"(ii) 80% of all Eligible Domestic Accounts Receivable and 75% of all Eligible International Accounts Receivable at such time,".

2. Effective as of November 15, 1996, Sections 3.1(a)(i) and (ii) are amended and restated in their entirety as follows:

"(i) for Prime Rate Loans, at the Prime Rate per annum, plus 0.50% per annum.

"(ii) [Intentionally deleted]."

3. Effective as of November 15, 1996, Sections 3.1(b)(i) and (ii) are amended and restated in their entirety as follows:

"(i) for Prime Rate Loans, at the Prime Rate per annum, plus 0.50% per annum; and

"(ii) for LIBOR Loans, at the LIBOR Rate, plus 300 basis points per annum."

4. Section 3.1 is further amended by inserting the following subsection (d):

"(d) Notwithstanding anything to the contrary in this Credit Agreement or any other agreement or instrument to which either of the Banks is a party, effective as of November 15, 1996 the Borrowers shall not request, and shall have no right to receive, from the Banks any Working Capital Line of Credit Loan that would constitute a LIBOR Loan."

5. The Section 8.11 is amended and restated in its entirety as follows:

"8.11 Quick Ratio. The Borrowers will not permit the Quick Ratio to be less than (a) 1.10 to 1 at the end of the fiscal quarter ending December 31, 1996 or (b) 1.20 to 1 at the end of any fiscal quarter thereafter."

6. Section 8.12 is amended and restated in its entirety as follows:

"8.12 Minimum Profitability. The Borrowers will not (a) incur Net Losses in the fiscal quarter ending September 30, 1997 or thereafter, (b) permit cumulative Net Income for the four consecutive fiscal quarters ending on March 31, 1998 and June 30, 1998, respectively, to be less than $1,000,000, or (c) permit cumulative Net Income for any four consecutive fiscal quarters, beginning with the four consecutive fiscal quarters ending on September 30, 1998, to be less than $2,000,000."

7. Section 8.13 is amended by deleting the ratio "1.25 to 1" appearing therein and substituting in lieu thereof the ratio "0.75 to 1".

8. Section 8.14 is amended and restated in its entirety as follows:

"8.14 Tangible Net Worth. The Borrowers will not permit Tangible Net Worth at the end of any fiscal quarter to be less than $47,500,000 minus the cumulative amount, not to exceed $3,000,000 in the aggregate, of extraordinary charges appropriately disclosed in the Borrowers' financial statements beginning with the fiscal quarter ending December 31, 1996."

9. Section 8.15 is deleted and there is substituted in lieu thereof the following:

"8.15 Cash Flow Coverage. [Intentionally deleted.]"

10. The definition of "Quick Ratio" in Section 11.1 is amended and restated in its entirety as follows:

"Quick Ratio" means, at any time, all cash and accounts receivable, less reserves for doubtful accounts, less advance billings to customers, of the Borrowers and their Subsidiaries at such time, on a consolidated basis, determined in accordance with GAAP, divided by the sum (without duplication) of (a) the aggregate of all Current Liabilities at such time, (b) then outstanding Working Capital Extensions of Credit, (c) then outstanding Equipment Line of Credit Loans, and (d) the then current portion of long-term Indebtedness of the Borrowers and their Subsidiaries as calculated in accordance with GAAP."

CONSENT

The undersigned, as Guarantor under the Subsidiary Guaranty dated as of September 29, 1995 (the "Guaranty") in favor of Silicon Valley Bank and Fleet National Bank (successor to Fleet Bank of Massachusetts, N.A.), hereby consents to the foregoing letter amendment and hereby confirms and agrees that the Guaranty is, and shall continue to be, in full force and effect and is hereby ratified and confirmed in all respects, except that, upon the effectiveness of, and on and after the date of, said letter amendment, each reference in the Guaranty and in each other Loan Document (as defined in the Credit Agreement referred to in the foregoing letter amendment) to which the undersigned is a party, including, without limitation, the Security Agreement dated as of September 29, 1995 to which the Guarantor is a party, to "the Credit Agreement", "thereunder", "thereof", "therein", or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement as amended thereby.

ALPHA SECURITIES CORP.

By:_____
Name:
Title:

[LETTERHEAD OF ALPHA INDUSTRIES, INC. APPEARS HERE]

Exhibit (10)(f)

January 13, 1997

Mr. Thomas C. Leonard
15 Meadow View Rd.
Topsfield MA 01983

Re: Severance Agreement

Dear Tom:

This letter is to confirm the severance arrangements that we have agreed upon with respect to your employment with Alpha Industries, Inc. (the "Company").

1. Change in Control

1.1. If: (i) a Change in Control occurs while you are employed by the Company as President and Chief Executive Officer, and (ii) your employment with the Company is voluntarily or involuntarily terminated within two (2) years after such Change in Control, then you will receive the benefits specified Section 1.3 below.

1.2. A "Change in Control" shall be deemed to have occurred if the Continuing Directors shall have ceased for any reason to constitute a majority of the Board of Directors of the Company. For this purpose, a "Continuing Director" shall include and be limited to any member of the Board of Directors of the Company as of the date of this letter and any Director nominated for election to the Board of Directors of the Company by at least 75% of the then Continuing Directors.

1.3. In the event that your employment with the Company is terminated in the manner described in Section 1.1 above (the date of such termination being referred to as the "Control Termination Date"), (i) on the Control Termination Date, the Company will pay to you a lump sum equal to two times your annual compensation for the twelve (12) full month period prior to the Change in Control, including all wages, salary, bonus and incentive compensation, whether or not includable in gross income for federal income tax purposes (the "Control Severance Payment"); and (ii) all Company stock options then outstanding and

held by you, whether or not by their terms then exercisable, shall, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the Control Termination Date. Notwithstanding anything to the contrary contained in this Agreement, in the event that the Control Severance Payment, either alone or together with other payments which you have the right to receive from the Company, would constitute a "parachute payment" (as defined in Section 280G of the Internal Revenue Code of 1986 as amended (the "Code")), then the Control Severance Payment shall be reduced to the largest amount that will result in no portion of such payment being subject to the excise tax imposed by Section 4999 of the Code. The determination of any such reduction shall be made by the Board of Directors of the Company, acting in good faith and in consultation with the Company's accountants and counsel.

2. Termination Without Cause or for Good Reason

2.1. If, while you are employed by the Company as President and Chief Executive Officer, (i) your employment with the Company is involuntarily terminated without Cause, or (ii) you terminate your employment with the Company for Good Reason, then you will receive the benefits specified in Section 2.4 below. If your employment is terminated involuntarily by the Company for Cause, you will not be entitled to receive the benefits specified in Section 2.4 below.

2.2. "Cause" shall mean: (i) deliberate dishonesty significantly detrimental to the best interests of the Company or any subsidiary or affiliate; (ii) conduct on your part constituting an act of moral turpitude; (iii) willful disloyalty to the Company or refusal or failure to obey the directions of the Board of Directors; (iv) incompetent performance or substantial or continuing inattention to or neglect of duties assigned to you.

2.3 "Good Reason" shall mean: (i) the assignment to you of any duties inconsistent in any respect with your position as the President and Chief Executive Officer of the Company; or (ii) any reduction in your base salary or rate of compensation; or (iii) any requirement imposed on you by the Company that you relocate outside the eastern Massachusetts area.

2.4 In the event that your employment with the Company is terminated in the manner described in Section 2.1 above (the date of such termination being referred to as

the "Termination Date"), (i) beginning with the Termination Date, the Company will pay to you a continuing stream of weekly salary payments for two years at the highest rate that your base salary was paid to you at any time during the one (1) year period immediately preceding the Termination Date; and (ii) all Company stock options then outstanding and held by you, whether or not by their terms then exercisable, shall, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the Termination Date.

3. Non-Competition

3.1. During: (i) the term of your employment with the Company and for one (1) year thereafter, and (ii) the actual term of your consulting arrangement (the "Noncompete Period"), you will not, directly or indirectly, whether as owner, partner, shareholder, director, consultant, agent, employee, or otherwise, or through any person, engage in any employment, consulting or other activity which competes with the business of the Company or any of its subsidiaries or affiliates. You acknowledge and agree that your direct or indirect participation in the conduct of such competing business alone or with any person other than the Company will materially impair the business and prospects of the Company. During the Noncompete Period, you will not (i) attempt to hire any director, officer, employee or agent of the Company, (ii) assist in hiring such hiring by any other person, (iii) encourage any person to terminate his or her employment or business relationship with the Company, (iv) encourage any customer or supplier of the Company to terminate its relationship with the Company, or (v) obtain, or assist in obtaining, for your own benefit (other than indirectly as an employee of the Company) any customer of the Company. If any of the restrictions provided for in this Section 3.1 are adjudicated to be excessively broad as to scope, geographic area, time or otherwise, said restriction shall be reduced to the extent necessary to make the restriction reasonable and shall be binding on you as so reduced. Any provisions of this Section 3.1 not so reduced shall remain in full force an effect. It is understood that during the Noncompete Period, you will make yourself available to the Company for consultation on behalf of the Company, upon reasonable request and at a reasonable rate of compensation and at reasonable times in light of any commitment you may have to a new employer.

3.2. You understand and acknowledge that the Company's remedies at law for breach of any of the restrictions in Section 3.1 above are inadequate and that any such

breach will cause irreparable harm to the Employer. You therefore agree that in addition and as a supplement to such other rights and remedies as may exist in the Company's favor, the Company may apply to any court having jurisdiction to enforce the specific performance of the restrictions in Section 3.1, and may apply for injunctive relief against any act which would violate those restrictions.

4. Post-employment Consulting

4.1 The Company wishes to ensure that your continuing advice and support is available after you cease to serve in your current capacity, and you are agreeable to providing such advice and support. Therefore, subject to the conditions set out in Section 4.2 below, the Company agrees: (i) to retain you, and you agree to act, as a consultant for a term of two (2) years from the date of your retirement, at an annual consulting fee equal to your annual salary as of the date of your retirement, and (ii) that all Company stock options then outstanding and held by you, whether or not by their terms then exercisable, shall, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the effective date of your retirement

4.2 The consulting arrangement set out in Section 4.1 above will be available to you only if: (i) you are still President and Chief Executive Officer of the Company on September 30, 1999, and (ii) your retirement is effective at any time between October 1, 1999 and September 30, 2000, and (iii) you give the Company six (6) months written advance notice of your intention to retire.

5. Payments Under Sections 2.4 and 4.1

Payments provided for in Sections 2.4 and 4.1 of this letter will: (i) be made at the same rate as you were receiving on the date of employment termination or retirement; (ii) be paid in equal periodic installments at such intervals as the Company shall generally pay its officers, and (iii) be reduced by the amount of any compensation that you receive from any person for services rendered during the period in which you are receiving such payments.

6. Miscellaneous

This agreement sets forth the entire understanding of the parties with respect to the subject matter hereof and may be modified only by a written instrument duly

executed by each party. This agreement replaces and supersedes all prior agreements relating to your employment by the Company. This agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts.

Please sign both copies of this letter and return one to the Company.

Sincerely,

/s/ George S. Kariotis
- ---------------------------

George Kariotis
Chairman of the Board

/s/ Sidney Topol
- ---------------------------
Sidney Topol
Chairman of the Compensation Committee
of the Board of Directors

AGREED TO:

/s/ Thomas C. Leonard

Thomas C. Leonard

Date: 17 JAN 1997

[LETTERHEAD OF ALPHA INDUSTRIES, INC. APPEARS HERE]

May 20, 1997

Exhibit (10)(g)

Mr. David J. Aldrich
81 Cross Street
Andover MA 01810

Re: Severance Agreement

Dear Dave:

This letter is to confirm the severance arrangements that we have offered to you as a Vice President of Alpha Industries, Inc. ("Alpha").

1. If: (i) a Change in Control occurs while you are employed by Alpha, and (ii) your employment with Alpha is voluntarily or involuntarily terminated within two (2) years thereafter, then: (a) Alpha will pay you two (2) years of salary continuation (and any bonus guaranteed or earned prior to the date of termination) in accordance with the terms and conditions of this letter, and (b) all Alpha stock options then outstanding and held by you, whether or not by their terms then exercisable, will, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the date of employment termination.

2. A "Change in Control" will be deemed to have occurred if the Continuing Board of Alpha shall have ceased for any reason to constitute a majority of the Board of Directors of Alpha. For this purpose, a "Continuing Director" will include any member of the Board of Directors of Alpha as a date of this letter and any person nominated for election to the Board of Directors of Alpha by a majority of the then Continuing Directors.

3. If, at any time, your employment with Alpha is involuntarily terminated without Cause, then: (a) Alpha will pay you two (2) years of salary continuation (and any bonus guaranteed or earned prior to the date of termination) in accordance with the terms and conditions of this letter, and (b) all Alpha stock options then outstanding and held by you, whether or not by their terms then exercisable, will, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the date of employment termination.

4. "Cause" will mean: (a) deliberate dishonesty detrimental to the best interests of Alpha or any subsidiary, or (b) conduct constituting moral turpitude, or (c) willful disloyalty to Alpha, or (d) refusal or failure to obey the directions of the CEO of Alpha, or (e) incompetent performance or substantial or continuing inattention to or neglect of duties and responsibilities assigned to you.

5. Salary continuation payments under this letter will: (a) be made at the same rate as you were receiving on the date of employment termination; (b) be paid in equal periodic installments at such intervals as Alpha shall generally pay its officers, and (c) be reduced by the amount of any

compensation that you receive from any person for services rendered during the salary continuation period. Notwithstanding the foregoing, you will not receive any salary continuation payments for any period in which you fail to actively seek gainful employment.

6. During the term of your employment with Alpha and for the first twelve (12) months after the date on which your employment with Alpha is voluntarily or involuntarily terminated (the "Noncompete Period"), you will not, directly or indirectly, whether as owner, partner, shareholder, director, consultant, agent, employee, or otherwise, or through any person, engage in any employment, consulting or other activity which competes with the business of Alpha or any subsidiary or affiliate of Alpha (collectively, the "Company"). You acknowledge and agree that your direct or indirect participation in the conduct of such competing business alone or with any person will materially impair the business and prospects of Alpha. During the Noncompete Period, you will not (i) attempt to hire any director, officer, employee or agent of the Company, (ii) assist in such hiring by any other person, (iii) encourage any person to terminate his or her employment or business relationship with the Company, (iv) encourage any customer or supplier of the Company to terminate its relationship with the Company, or (v) obtain, or assist in obtaining, for your own benefit (other than indirectly as an employee of the Company) any customer of the Company. If any of the restrictions provided for in this Section 6 are adjudicated to be excessively broad as to scope, geographic area, time or otherwise, said restriction shall be reduced to the extent necessary to make the restriction reasonable and shall be binding on you as so reduced. Any provisions of this Section 6 not so reduced shall remain in full force and effect. It is understood that during the Noncompete Period, you will make yourself available to the Company for consultation on behalf of the Company, upon reasonable request and at a reasonable rate of compensation and at reasonable times in light of any commitment you may have to a new employer. You understand and acknowledge that the Company's remedies at law for breach of any of the restrictions in this Section are inadequate and that any such breach will cause irreparable harm to the Company. You therefore agree that in addition and as a supplement to such other rights and remedies as may exist in the Company's favor, the Company may apply to any court having jurisdiction to enforce the specific performance of the restrictions in this Section, and may apply for injunctive relief against any act which would violate those restrictions.

Please sign both copies of this letter and return one to me. If you have any questions, please feel free to call me or Jim Nemiah.

Sincerely,

/s/ Thomas C. Leonard

Thomas C. Leonard
President and CEO

JCN/hs

AGREED TO:

/s/ David J. Aldrich

Date: 4/5/97

[LETTERHEAD OF ALPHA INDUSTRIES, INC. APPEARS HERE]

January 14, 1997

Exhibit (10)(h)

Mr. Richard Langman
1952 Sugarbush Drive
Evergreen, CO 80439

Re: Severance Agreement

Dear Rick:

This letter is to confirm the severance arrangements that we have offered you if you accept our offer of employment with Alpha Industries, Inc. ("Alpha") and Trans-Tech, Inc. ("Trans-Tech").

1. If: (i) a Change in Control occurs while you are employed by Trans-Tech, and (ii) your employment with Trans-Tech is voluntarily or involuntarily terminated within two (2) years thereafter, then: (a) Trans-Tech will pay you two (2) years of salary continuation (and any bonus guaranteed or earned prior to the date of termination) in accordance with the terms and conditions of this letter, and (b) all Alpha stock options then outstanding and held by you, whether or not by their terms then exercisable, will, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the date of employment termination.

2. A "Change in Control" will be deemed to have occurred if:

(i) the Continuing Board of Alpha shall have ceased for any reason to constitute a majority of the Board of Directors of Alpha. For this purpose, a "Continuing Director" will include any member of the Board of Directors of Alpha as a date of this letter and any person nominated for election to the Board of Directors of Alpha by a majority of the then Continuing Directors, or

(ii) Alpha ceases to own more than 50% of the stock of Trans-Tech (except in the case of a public offering of Trans-Tech stock).

3. If your employment with Trans-Tech is involuntarily terminated while you are employed by Trans-Tech without Cause, then: (a) Trans-Tech will pay you two years of salary continuation (and any bonus guaranteed or earned prior to the date of termination) in accordance with the terms and conditions of this letter, and (b) all Alpha stock options then

outstanding and held by you, whether or not by their terms then exercisable, will, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the date of employment termination.

4. "Cause" will mean: (a) deliberate dishonesty detrimental to the best interests of Alpha or Trans-Tech or any subsidiary, or (b) conduct constituting moral turpitude, or (c) willful disloyalty to Alpha or Trans-Tech, or (d) refusal or failure to obey the directions of the CEO of Alpha or the Board of Directors of Trans-Tech, or (e) incompetent performance of substantial or continuing inattention to or neglect of duties and responsibilities assigned to you.

5. Salary continuation payments under this letter will: (a) be made at the same rate as you were receiving on the date of employment termination; (b) be paid in equal periodic installments at such intervals as Trans-Tech shall generally pay its officers, and (c) be reduced by the amount of any compensation that you receive from any person for services rendered during the salary continuation period. Notwithstanding the foregoing, you will not receive any salary continuation payments for any period in which you either: (i) engage in activities or enterprises (on behalf of yourself or others) that are directly competitive with any business activity of Alpha Industries, Inc. or any of its subsidiaries, or (ii) fail to actively seek gainful employment.

6. The following noncompetition provisions apply during both of the following (the "Noncompete Period"):

(i) the term of your employment with the Company, and

(ii) the first twelve (12) months after the date on which your employment with Trans-Tech terminates , but only if your employment terminates after the second anniversary of your date of hire.

During the Noncompete Period you will not, directly or indirectly, whether as owner, partner, shareholder, director, consultant, agent, employee, or otherwise, or through any person, engage in any employment, consulting or other activity which competes with the business of Trans-Tech or any subsidiary or affiliate of Alpha that develops, manufactures or sells high-dielectric materials for wireless communication. You acknowledge and agree that your direct or indirect participation in the conduct of such competing business alone or with any person will materially impair the business and prospects of Alpha. During the Noncompete Period, you will not (i) attempt to hire any director, officer, employee or agent of Alpha or any subsidiary or affiliate of Alpha (collectively, the "Company"), (ii) assist in such hiring by any other person, (iii) encourage any person to terminate his or her employment or business relationship with the Company, (iv) encourage any customer or supplier of the Company to

terminate its relationship with the Company, or (v) obtain, or assist in obtaining, for your own benefit (other than indirectly as an employee of the Company) any customer of the Company. If any of the restrictions provided for in this Section 6 are adjudicated to be excessively broad as to scope, geographic area, time or otherwise, said restriction shall be reduced to the extent necessary to make the restriction reasonable and shall be binding on you as so reduced. Any provisions of this Section 6 not so reduced shall remain in full force an effect. It is understood that during the Noncompete Period, you will make yourself available to the Company for consultation on behalf of the Company, upon reasonable request and at a reasonable rate of compensation and at reasonable times in light of any commitment you may have to a new employer. You understand and acknowledge that the Company's remedies at law for breach of any of the restrictions in this Section are inadequate and that any such breach will cause irreparable harm to the Company. You therefore agree that in addition and as a supplement to such other rights and remedies as may exist in the Company's favor, the Company may apply to any court having jurisdiction to enforce the specific performance of the restrictions in this Section, and may apply for injunctive relief against any act which would violate those restrictions.

Please sign both copies of this letter and return one to me. If you have any questions, please feel free to call me or Jim Nemiah.

Sincerely,

/s/ George LeVan

George LeVan
Director of Human Resources

JCN/hs

AGREED TO:

Date:

[LETTERHEAD OF ALPHA INDUSTRIES, INC. APPEARS HERE]

EXHIBIT (10)(i)

October 4, 1996

Mr. Martin J. Reid
7 Wainwright Road, #59
Winchester MA 01890

Re: Ongoing relationship

Dear Woody:

As we have discussed, Alpha Industries, Inc. ("Alpha") wishes to provide a contractual basis for an ongoing relationship between you and Alpha. This letter sets out the terms that we have discussed.

1. This agreement replaces and supersedes all prior agreements relating to you employment by the Company, including without limitation the Severance Agreement dated July 1, 1996, which is hereby terminated and canceled as of the date of this agreement.

2. You resigned your positions as President and Chief Executive Officer of Alpha on July 16, 1996. You will remain an employee of Alpha on the terms and with the rights and benefits set out below in this letter.

3. Alpha agrees that your salary will continue at the annual rate of $290,000.00, which is $5,576.92 per week, on a weekly basis through October 4, 1998, subject to the following conditions.

   a. In the event of your death, Alpha will make the stream of weekly payments provided above in this Section to your estate until the first to occur of: (i) one year after the date of your death, or (ii) October 4, 1998.

   b. Except as prohibited by this agreement in Section 4, you are free to accept any other employment opportunity. Except in the event that you violate any term or provision of this agreement, the payments provided for in this Section will not

be reduced, terminated or otherwise effected by your acceptance of other employment or your receipt of other compensation.

4. From July 16, 1996 through the later to occur of (a) October 4, 1997, or (b) the termination of your employee status with Alpha (the "Noncompete Period"), you will not, directly or indirectly, whether as owner, partner, shareholder, director, consultant, agent, employee, or otherwise, or through any person, engage in any employment, consulting or other activity which competes with the business of the Company or any of its subsidiaries or affiliates. You acknowledge and agree that your direct or indirect participation in the conduct of such competing business alone or with any person other than the Company will materially impair the business and prospects of the Company. During the Noncompete Period, you will not (i) attempt to hire any director, officer, employee or agent of the Company, (ii) assist in such hiring by any other person, (iii) encourage any person to terminate his or her employment or business relationship with the Company, (iv) encourage any customer or supplier of the Company to reduce or terminate its relationship with the Company. If any of the restrictions provided for in this Section are adjudicated to be excessively broad as to scope, geographic area, time or otherwise, said restriction shall be reduced to the extent necessary to make the restriction reasonable and shall be binding on you as so reduced. Any provisions of this Section not so reduced shall remain in full force an effect. It is understood that during the Noncompete Period, you will make yourself available to the Company for consultation on behalf of the Company, upon reasonable request and at a reasonable rate of compensation and at reasonable times in light of any commitment you may have to a new employer.

You understand and acknowledge that the Company's remedies at law for breach of any of the restrictions in this Section are inadequate and that any such breach will cause irreparable harm to the Employer. You therefore agree that in addition and as a supplement to such other rights and remedies as may exist in the Company's favor, the Company may apply to any court having jurisdiction to enforce the specific performance of the restrictions in this Section, and may apply for injunctive relief against any act which would violate those restrictions.

5. You agree to cooperate with Alpha in effecting your resignation from all of the positions that you have held with subsidiaries and other affiliates of Alpha and in taking any other actions required due to your change of status with Alpha.

6. You will be an employee of Alpha on the terms and conditions set out below:

a. Your responsibilities will be such as are mutually acceptable to and agreed upon by you and the President of Alpha. Under no circumstances will you be

asked to perform any duties inconsistent in any respect with your position as the former President and Chief Executive Officer of Alpha.

b. Your employee status will not affect your receipt of salary continuation as set out in Section 3 above, and neither such status nor its termination for any reason will entitle you to receipt of additional salary or to continuation of your salary past October 4, 1998.

c. As long as your employee status continues, you will be eligible to participate in Alpha's medical insurance plan on the same basis that you did prior to July 16, 1996. Alpha's obligation to provide you with such coverage is limited to allowing you to participate in any medical insurance plan or plans then available to the employees of Alpha, subject to the terms of the applicable plan documents, generally applicable Alpha policies and actions by Alpha contemplated by such plans.

d. As long as your employee status continues, your Company stock options will continue to be valid and exercisable in accordance with their terms and conditions. Upon termination of such status for any reason, all Company stock options then outstanding and held by you, whether or not by their terms then exercisable, shall, subject to their other terms and conditions, become immediately exercisable and remain exercisable for a period of ninety (90) days after the date of termination.

e. As long as your employee status continues, you will be eligible to participate in the following additional Alpha employee benefit plans: Group Life Insurance, Dependent Life Insurance, Long-Term Disability, Dental Insurance, 401(k) Plan, Executive Deferred Compensation Plan, and Employee Stock Purchase Plan. Such participation shall be on the same basis as your participation in such plans prior to July 16, 1996. Alpha's obligation to provide you with such coverage is limited to allowing you to participate in any such plan or plans then available to the employees of Alpha, subject to the terms of the applicable plan documents, generally applicable Alpha policies and actions by Alpha contemplated by such plans. You will not participate in any other Alpha employee benefit plan or policy, including without limitation accrual of vacation or sick time.

e. Your employee status with Alpha: (i) will terminate on October 4, 1998, unless terminated sooner as provided herein, (ii) may be terminated by you at any time for any reason, (iii) may be terminated by Alpha at any time upon written notice to you in the event that you materially breach your obligations under this

agreement, and (iv) will terminate upon your receipt of full-time employment that makes available to you and your family medical insurance benefits substantially comparable to those then provided to you by Alpha.

7. Promptly after the execution of this letter, you will receive: (a) the value of your accrued and unused vacation time in a lump sum, and (b) the value of your SERP account in a lump sum.

If the agreement set out in this letter is acceptable to you, please so indicate by signing both copies of the letter and returning one to Jim Nemiah at Alpha.

Sincerely,

ALPHA INDUSTRIES, INC.

By:

Chairman of the Board

By: [SIGNATURE APPEARS HERE]

President and CEO

ACCEPTED AND AGREED TO:

/s/ Martin J. Reid

Martin J. Reid

EXHIBIT (10)(n)

ALPHA INDUSTRIES SAVINGS

AND RETIREMENT 401(k) PLAN

(July 1, 1996 Restatement)

PREAMBLE

The Alpha Industries Savings and Retirement 401(k) Plan, originally effective as of April 1, 1986, is hereby amended and restated in its entirety. The Plan, as amended and restated hereby, is intended to qualify as a profit-sharing plan under Section 401(a) of the Code, and includes a cash or deferred arrangement that is intended to qualify under Section 401(k) of the Code. The Plan is maintained for the exclusive benefit of eligible employees and their beneficiaries.

Notwithstanding any other provision of the Plan to the contrary, a Participant's vested interest in his Separate Account under the Plan on and after the effective date of this amendment and restatement shall be not less than his vested interest in his account on the day immediately preceding the effective date. In addition, notwithstanding any other provision of the Plan to the contrary, the forms of payment and other Plan provisions that were available under the Plan immediately prior to the later of the effective date of this amendment and restatement or the date this amendment and restatement is adopted and that may not be eliminated under Section 411(d)(6) of the Code shall continue to be available to Participants who had an account under the Plan on the day immediately preceding the later of the effective date or the date this amendment and restatement is adopted.

ARTICLE I
DEFINITIONS

1.1. Plan Definitions

As used herein, the following words and phrases have the meanings hereinafter set forth, unless a different meaning is plainly required by the context:

The "Administrator" means the Sponsor unless the Sponsor designates another person or persons to act as such.

An "After-Tax Contribution" means any after-tax employee contribution made by a Participant as may be permitted under Article V.

The "Beneficiary" of a Participant means the person or persons entitled under the provisions of the Plan to receive distribution hereunder in the event the Participant dies before receiving distribution of his entire interest under the Plan.

The "Code" means the Internal Revenue Code of 1986, as amended from time to time. Reference to a section of the Code includes such section and any comparable section or sections of any future legislation that amends, supplements, or supersedes such section.

The "Compensation" of a Participant for any period means the wages as defined in Section 3401(a) of the Code, determined without regard to any rules that limit compensation included in wages based on the nature or location of the employment or services performed, and all other payments made to him for such period for services as an Employee for which his Employer is required to furnish the Participant a written statement under Sections 6041(d), 6051(a)(3), and 6052 of the Code, and excluding reimbursements or other expense allowances, fringe benefits, moving expenses, deferred compensation, and welfare benefits, but determined prior to any exclusions for amounts deferred under Section 125, 402(e)(3), 402(h)(1)(B), 403(b), or 457(b) of the Code or for certain contributions described in Section 414(h)(2) of the Code that are picked up by the employing unit and treated as employer contributions.

Notwithstanding the foregoing, Compensation shall not include the value of any qualified or non-qualified stock option granted to the Participant by his Employer to the extent such value is includible in the Participant's taxable income.

In no event, however, shall the Compensation of a Participant taken into account under the Plan for any Plan Year exceed (1) $200,000 for Plan Years beginning prior to January 1, 1994, or (2) $150,000 for Plan Years beginning on or after January 1, 1994 (subject to adjustment annually as provided in Section 401(a)(17)(B) and Section 415(d) of the Code; provided, however, that the dollar increase in effect on January 1 of any calendar year, if any, is effective for Plan Years beginning in such calendar year). If the Compensation of a Participant is determined over a period of time that contains fewer than 12 calendar months, then the annual compensation limitation described above shall be adjusted with respect to that Participant by multiplying the annual compensation limitation in effect for the Plan Year by a fraction the numerator of which

is the number of full months in the period and the denominator of which is 12; provided, however, that no proration is required for a Participant who is covered under the Plan for less than one full Plan Year if the formula for allocations is based on Compensation for a period of at least 12 months. In determining the Compensation, for purposes of applying the annual compensation limitation described above, of a Participant who is a five percent owner or among the ten Highly Compensated Employees receiving the greatest Compensation for the Plan Year, the Compensation of the Participant's spouse and of his lineal descendants who have not attained age 19 as of the close of the Plan Year shall be included as Compensation of the Participant for the Plan Year. If as a result of applying the family aggregation rule described in the preceding sentence the annual compensation limitation would be exceeded, the limitation shall be prorated among the affected family members in proportion to each member's Compensation as determined prior to application of the family aggregation rules.

A "Contribution Period" means the period specified in Article VI for which Employer Contributions shall be made.

An "Eligible Employee" means any Employee who has met the eligibility requirements of Article III to have Tax-Deferred Contributions made to the Plan on his behalf.

The "Eligibility Service" of an employee means the period or periods of service credited to him under the provisions of Article II for purposes of determining his eligibility to participate in the Plan as may be required under Article III or Article VI.

An "Employee" means any employee of an Employer other than an employee who is covered by a collective bargaining agreement that does not specifically provide for coverage under the Plan.

An "Employer" means the Sponsor and any entity which has adopted the Plan as may be provided under Article XX.

An "Employer Contribution" means the amount, if any, that an Employer contributes to the Plan as may be provided under Article VI or Article XXII.

An "Enrollment Date" means the first day of each calendar month of the Plan Year.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time. Reference to a section of ERISA includes such section and any comparable section or sections of any future legislation that amends, supplements, or supersedes such section.

The "General Fund" means a Trust Fund maintained by the Trustee as required to hold and administer any assets of the Trust that are not allocated among any separate Investment Funds as may be provided in the Plan or the Trust Agreement. No General Fund shall be maintained if all assets of the Trust are allocated among separate Investment Funds.

A "Highly Compensated Employee" means an Employee or former Employee who is a highly compensated active employee or highly compensated former employee as defined hereunder.

A "highly compensated active employee" includes any Employee who performs services for an Employer during the determination year and who (i) was a five percent owner at any time during the determination year or the look back year, (ii) received compensation from an Employer during the look back year in excess of $75,000 (subject to adjustment annually at the same time and in the same manner as under Section 415(d) of the Code), (iii) was in the top paid group of employees for the look back year and received compensation from an Employer during the look back year in excess of $50,000 (subject to adjustment annually at the same time and in the same manner as under Section 415(d) of the Code), (iv) was an officer of an Employer during the look back year and received compensation during that year in excess of 50 percent of the dollar limitation in effect for that year under Section 415(b)(1)(A) of the Code or, if no officer received compensation in excess of that amount for the look back year or the determination year, received the greatest compensation for the look back year of any officer, or (v) was one of the 100 employees paid the greatest compensation by an Employer for the determination year and would be described in (ii), (iii), or (iv) above if the term "determination year" were substituted for "look back year"

A "highly compensated former employee" includes any Employee who separated from service from an Employer and all Related Companies (or is deemed to have separated from service from an Employer and all Related Companies) prior to the determination year, performed no services for an Employer during the determination year, and was a highly compensated active employee for either the separation year or any determination year ending on or after the date the Employee attains age 55.

The determination of who is a Highly Compensated Employee hereunder, including determinations as to the number and identity of employees in the top paid group, the 100 employees receiving the greatest compensation from an Employer, the number of employees treated as officers, and the compensation considered, shall be made in accordance with the provisions of Section 414(q) of the Code and regulations issued thereunder. For purposes of this definition, the following terms have the following meanings:

(a) The "determination year" means the Plan Year or, if the Administrator makes the election provided in paragraph (b) below, the period of time, if any, which extends beyond the look back year and ends on the last day of the Plan Year for which testing is being performed (the "lag period"). If the lag period is less than 12 months long, the dollar amounts specified in (ii), (iii), and (iv) above shall be prorated based upon the number of months in the lag period.

(b) The "look back year" means the 12-month period immediately preceding the determination year; provided, however, that the Administrator may elect instead to treat the calendar year ending with or within the determination year as the "look back year"

An "Hour of Service" with respect to a person means each hour, if any, that may be credited to him in accordance with the provisions of Article II.

An "Investment Fund" means any separate investment Trust Fund maintained by the Trustee as may be provided in the Plan or the Trust Agreement or any separate investment fund maintained

by the Trustee, to the extent that there are Participant Sub-Accounts under such funds, to which assets of the Trust may be allocated and separately invested.

A "Matching Contribution" means any Employer Contribution made to the Plan on account of a Participant's Tax-Deferred Contributions as provided in Article VI.

The "Normal Retirement Date" of an employee means the date he attains age 65.

A "Participant" means any person who has a Separate Account in the Trust.

The "Plan" means Alpha Industries Savings and Retirement 401(k) Plan, as from time to time in effect.

A "Plan Year" means the 12-consecutive-month period ending December 31.

A "Profit-Sharing Contribution" means any Employer Contribution made to the Plan as provided in Article VI, other than Matching Contributions.

A "Related Company" means any corporation or business, other than an Employer, which would be aggregated with an Employer for a relevant purpose under Section 414 of the Code.

A "Rollover Contribution" means any rollover contribution to the Plan made by a Participant as may be permitted under Article V.

A "Separate Account" means the account maintained by the Trustee in the name of a Participant that reflects his interest in the Trust and any Sub-Accounts maintained thereunder, as provided in Article VIII.

The "Settlement Date" of a Participant means the date on which a Participant's interest under the Plan becomes distributable in accordance with Article XV.

The "Sponsor" means Alpha Industries, Inc., and any successor thereto.

A "Sub-Account" means any of the individual sub-accounts of a Participant's Separate Account that is maintained as provided in Article VIII.

A "Tax-Deferred Contribution" means the amount contributed to the Plan on a Participant's behalf by his Employer in accordance with his reduction authorization executed pursuant to Article IV.

The "Trust" means the trust maintained by the Trustee under the Trust Agreement.

The "Trust Agreement" means the agreement entered into between the Sponsor and the Trustee relating to the holding, investment, and reinvestment of the assets of the Plan, together with all amendments thereto.

The "Trustee" means the trustee or any successor trustee which at the time shall be designated, qualified, and acting under the Trust Agreement. The Sponsor may designate a person or persons other than the Trustee to perform any responsibility of the Trustee under the Plan, other than trustee responsibilities as defined in Section 405(c)(3) of ERISA, and the Trustee shall not be liable for the performance of such person in carrying out such responsibility except as otherwise provided by ERISA. The term Trustee shall include any delegate of the Trustee as may be provided in the Trust Agreement.

A "Trust Fund" means any fund maintained under the Trust by the Trustee.

A "Valuation Date" means the date or dates designated by the Sponsor and communicated in writing to the Trustee for the purpose of valuing the General Fund and each Investment Fund and adjusting Separate Accounts and Sub-Accounts hereunder, which dates need not be uniform with respect to the General Fund, each Investment Fund, Separate Account, or Sub-Account; provided, however, that the General Fund and each Investment Fund shall be valued and each Separate Account and Sub-Account shall be adjusted no less often than once annually.

The "Vesting Service" of an employee means the period or periods of service credited to him under the provisions of Article II for purposes of determining his vested interest in his Employer Contributions Sub-Account, if Employer Contributions are provided for under either Article VI or Article XXII.

1.2. Interpretation

Where required by the context, the noun, verb, adjective, and adverb forms of each defined term shall include any of its other forms. Wherever used herein, the masculine pronoun shall include the feminine, the singular shall include the plural, and the plural shall include the singular.

ARTICLE II
SERVICE

2.1. Definitions

For purposes of this Article, the following terms have the following meanings:

(a) The "continuous service" of an employee means the service credited to him in accordance with the provisions of Section 2.3 of the Plan.

(b) The "employment commencement date" of an employee means the date he first completes an Hour of Service.

(c) A "maternity/paternity absence" means a person's absence from employment with an Employer or a Related Company because of the person's pregnancy, the birth of the person's child, the placement of a child with the person in connection with the person's adoption of the child, or the caring for the person's child immediately following the child's birth or adoption. A person's absence from employment will not be considered a maternity/paternity absence unless the person furnishes the Administrator such timely information as may reasonably be required to establish that the absence was for one of the purposes enumerated in this paragraph and to establish the number of days of absence attributable to such purpose.

(d) The "reemployment commencement date" of an employee means the first date following a severance date on which he again completes an Hour of Service.

(e) The "severance date" of an employee means the earlier of (i) the date on which he retires, dies, or his employment with an Employer and all Related Companies is otherwise terminated, or (ii) the first anniversary of the first date of a period during which he is absent from work with an Employer and all Related Companies for any other reason; provided, however, that if he terminates employment with or is absent from work with an Employer and all Related Companies on account of service with the armed forces of the United States, he shall not incur a severance date if he is eligible for reemployment rights under the Uniformed Services Employment and Reemployment Rights Act of 1994 and he returns to work with an Employer or a Related Company within the period during which he retains such reemployment rights.

2.2. Crediting of Hours of Service

A person shall be credited with an Hour of Service for each hour for which he is paid, or entitled to payment, for the performance of duties for an Employer or any Related Company.

2.3. Crediting of Continuous Service

A person shall be credited with continuous service for the aggregate of the periods of time between his employment commencement date or any reemployment commencement date and the

severance date that next follows such employment commencement date or reemployment commencement date; provided, however, that an employee who has a reemployment commencement date within the 12-consecutive-month period following the earlier of the first date of his absence or his severance date shall be credited with continuous service for the period between such severance date and reemployment commencement date.

2.4. Eligibility Service

An employee shall be credited with Eligibility Service equal to his continuous service.

2.5. Vesting Service

There shall be no Vesting Service credited under the Plan.

2.6. Crediting of Service on Transfer or Amendment

Notwithstanding any other provision of the Plan to the contrary, if an Employee is transferred from employment covered under a qualified plan maintained by an Employer or a Related Company for which service is credited based on Hours of Service and computation periods in accordance with Department of Labor Regulations similar to 2530.200 through 2530.203 to employment covered under the Plan or, prior to amendment, the Plan provided for crediting of service on the basis of Hours of Service and computation periods, an affected Employee shall be credited with Eligibility Service hereunder equal to:

(a) the Employee's years of service credited to him under the Hours of Service method before the computation period in which the transfer or the effective date of the amendment occurs, plus

(b) the greater of (i) the period of service that would be credited to the Employee under the elapsed time method provided hereunder for his employment during the entire computation period in which the transfer or the effective date of the amendment occurs or (ii) the service taken into account under the Hours of Service method for such computation period as of the transfer date or the effective date of the amendment, plus

(c) the service credited to such Employee under the elapsed time method provided hereunder for the period of time beginning on the day after the last day of the computation period in which the transfer or the effective date of the amendment occurs.

ARTICLE III
ELIGIBILITY

3.1. Eligibility

Each Employee who was an Eligible Employee immediately prior to the effective date of this amendment and restatement shall continue to be an Eligible Employee. Each other Employee shall become an Eligible Employee as of the Enrollment Date coinciding with or next following the date on which he has both attained age 21 and completed 6 full calendar months of Eligibility Service.

3.2. Transfers of Employment

If a person is transferred directly from employment with an Employer or with a Related Company in a capacity other than as an Employee to employment as an Employee, he shall become an Eligible Employee as of the date he is so transferred if prior to an Enrollment Date coinciding with or preceding such transfer date he has met the eligibility requirements of Section 3.1. Otherwise, the eligibility of a person who is so transferred to elect to have Tax-Deferred Contributions made to the Plan on his behalf shall be determined in accordance with Section 3.1.

3.3. Reemployment

If a person who terminated employment with an Employer and all Related Companies is reemployed as an Employee and if he had been an Eligible Employee prior to his termination of employment, he shall again become an Eligible Employee on the date he is reemployed. Otherwise, the eligibility of a person who terminated employment with an Employer and all Related Companies and who is reemployed by an Employer or a Related Company to elect to have Tax-Deferred Contributions made to the Plan on his behalf shall be determined in accordance with Section 3.1 or 3.2.

3.4. Notification Concerning New Eligible Employees

Each Employer shall notify the Administrator as soon as practicable of Employees becoming Eligible Employees as of any date.

3.5. Effect and Duration

Upon becoming an Eligible Employee, an Employee shall be entitled to elect to have Tax-Deferred Contributions made to the Plan on his behalf and shall be bound by all the terms and conditions of the Plan and the Trust Agreement. A person shall continue as an Eligible Employee eligible to have Tax-Deferred Contributions made to the Plan on his behalf only so long as he continues employment as an Employee.

ARTICLE IV
TAX-DEFERRED CONTRIBUTIONS

4.1. Tax-Deferred Contributions

Effective as of the date he becomes an Eligible Employee, or any subsequent Enrollment Date, each Eligible Employee may elect in writing in accordance with rules prescribed by the Administrator to have Tax-Deferred Contributions made to the Plan on his behalf by his Employer as hereinafter provided. An Eligible Employee's written election shall include his authorization for his Employer to reduce his Compensation and to make Tax-Deferred Contributions on his behalf and his election as to the investment of his contributions in accordance with Article X. Tax-Deferred Contributions on behalf of an Eligible Employee shall commence with the first payment of Compensation made on or after the date on which his election is effective.

4.2. Amount of Tax-Deferred Contributions

The amount of Tax-Deferred Contributions to be made to the Plan on behalf of an Eligible Employee by his Employer shall be an integral percentage of his Compensation of not less than 1 percent nor more than 15 percent. In the event an Eligible Employee elects to have his Employer make Tax-Deferred Contributions on his behalf, his Compensation shall be reduced for each payroll period by the percentage he elects to have contributed on his behalf to the Plan in accordance with the terms of his currently effective reduction authorization.

4.3. Changes in Reduction Authorization

An Eligible Employee may change the percentage of his future Compensation that his Employer contributes on his behalf as Tax-Deferred Contributions at such time or times during the Plan Year as the Administrator may prescribe by filing an amended reduction authorization with his Employer such number of days prior to the date such change is to become effective as the Administrator shall prescribe. An Eligible Employee who changes his reduction authorization shall be limited to selecting a percentage of his Compensation that is otherwise permitted hereunder. Tax-Deferred Contributions shall be made on behalf of such Eligible Employee by his Employer pursuant to his amended reduction authorization filed in accordance with this Section commencing with Compensation paid to the Eligible Employee on or after the date such filing is effective, until otherwise altered or terminated in accordance with the Plan.

4.4. Suspension of Tax-Deferred Contributions

An Eligible Employee on whose behalf Tax-Deferred Contributions are being made may have such contributions suspended at any time by giving such number of days advance written notice to his Employer as the Administrator shall prescribe. Any such voluntary suspension shall take effect commencing with Compensation paid to such Eligible Employee on or after the expiration of the required notice period and shall remain in effect until Tax-Deferred Contributions are resumed as hereinafter set forth.

4.5. Resumption of Tax-Deferred Contributions

An Eligible Employee who has voluntarily suspended his Tax-Deferred Contributions may have such contributions resumed at such time or times during the Plan Year as the Administrator may prescribe, by filing a new reduction authorization with his Employer such number of days prior to the date as of which such contributions are to be resumed as the Administrator shall prescribe.

4.6. Delivery of Tax-Deferred Contributions

As soon after the date an amount would otherwise be paid to an Employee as it can reasonably be separated from Employer assets, each Employer shall cause to be delivered to the Trustee in cash all Tax-Deferred Contributions attributable to such amounts.

4.7. Vesting of Tax-Deferred Contributions
A Participant's vested interest in his Tax-Deferred Contributions Sub-Account shall be at all times 100 percent.

ARTICLE V
AFTER-TAX AND ROLLOVER CONTRIBUTIONS

5.1. No After-Tax Contributions

There shall be no After-Tax Contributions made to the Plan.

5.2. Rollover Contributions

An Employee who was a participant in a plan qualified under Section 401 or 403 of the Code and who receives a cash distribution from such plan that he elects either (i) to roll over immediately to a qualified retirement plan or (ii) to roll over into a conduit IRA from which he receives a later cash distribution, may elect to make a Rollover Contribution to the Plan if he is entitled under Section 402(c), Section 403(a)(4), or Section 408(d)(3)(A) of the Code to roll over such distribution to another qualified retirement plan. The Administrator may require an Employee to provide it with such information as it deems necessary or desirable to show that he is entitled to roll over such distribution to another qualified retirement plan. An Employee shall make a Rollover Contribution to the Plan by delivering, or causing to be delivered, to the Trustee the cash that constitutes the Rollover Contribution amount within 60 days of receipt of the distribution from the plan or from the conduit IRA in the manner prescribed by the Administrator. If the Employee does not already have an investment election on file with the Administrator, the Employee shall also deliver to the Administrator his election as to the investment of his contributions in accordance with Article X.

5.3. Vesting of Rollover Contributions

A Participant's vested interest in his Rollover Contributions Sub-Account shall be at all times 100 percent.

ARTICLE VI
EMPLOYER CONTRIBUTIONS

6.1. Contribution Period

The Contribution Period for Employer Contributions under the Plan shall be each Plan Year.

6.2. Profit-Sharing Contributions

Each Employer may, in its discretion, make a Profit-Sharing Contribution to the Plan for the Contribution Period in an amount determined by the Sponsor.

6.3. Allocation of Profit-Sharing Contributions

Any Profit-Sharing Contribution made for a Contribution Period shall be allocated among the Employees who are eligible to participate in the allocation of Profit-Sharing Contributions for the Contribution Period, as determined under this Article. The allocable share of each such Employee shall be in the ratio which his Compensation from the Employers for the Contribution Period bears to the aggregate of such Compensation for all such Employees. Notwithstanding any other provision of the Plan to the contrary, Compensation with respect to any period ending prior to the date on which an Employee first became eligible to participate in the allocation of Profit-Sharing Contributions shall be disregarded in determining the amount of the Employee's allocable share.

6.4. Matching Contributions

Each Employer shall make a Matching Contribution to the Plan for each Contribution Period in an amount equal to the following percentage of the aggregate "eligible Tax-Deferred Contributions" for the Contribution Period made on behalf of its Employees during the Contribution Period who are eligible to participate in the allocation of Matching Contributions for the Contribution Period as determined under this Article, based on the number of years in which the Employee has been employed by an Employer:

(a) With respect to eligible Employees employed by an Employer for less than 6 years, 100 percent of the first one percent of "eligible Tax-Deferred Contributions" for the Contribution Period made on behalf of such eligible Employees and 50 percent of the remaining "eligible Tax-Deferred Contributions" for the Contribution Period made on behalf of such eligible Employees. For purposes of this paragraph (a), similar to "eligible Tax-Deferred Contributions" with respect to an Employee mean the Tax-Deferred Contributions made on his behalf for the Contribution Period in an amount up to, but not exceeding, the "match level". For purposes of this paragraph (a), the "match level" means 5 percent of an Employee's Compensation for the Contribution Period, excluding Compensation with respect to any period ending prior to the date on which the Employee became eligible to participate in the allocation of Matching Contributions.

(b) With respect to eligible Employees employed by an Employer for 6 years or more, 100 percent of the first one percent of "eligible Tax-Deferred Contributions" for the Contribution Period made on behalf of such eligible Employees and 75 percent of the remaining "eligible Tax-Deferred Contributions" for the Contribution Period made on behalf of such eligible Employees. For purposes of this paragraph (a), "eligible Tax-Deferred Contributions" with respect to an Employee mean the Tax-Deferred Contributions made on his behalf for the Contribution Period in an amount up to, but not exceeding, the "match level". For purposes of this paragraph (a), the "match level" means 6 percent of an Employee's Compensation for the Contribution Period, excluding Compensation with respect to any period ending prior to the date on which the Employee became eligible to participate in the allocation of Matching Contributions.

6.5. Allocation of Matching Contributions

Any Matching Contribution made by an Employer for the Contribution Period shall be allocated among its Employees during the Contribution Period who are eligible to participate in the allocation of Matching Contributions for the Contribution Period, as determined under this Article. The allocable share of each such Employee shall be an amount equal to the percentage of the Tax-Deferred Contributions made on his behalf for the Contribution Period determined as provided in the preceding Section.

6.6. Verification of Amount of Employer Contributions by the Sponsor

The Sponsor shall verify the amount of Employer Contributions to be made by each Employer in accordance with the provisions of the Plan. Notwithstanding any other provision of the Plan to the contrary, the Sponsor shall determine the portion of the Employer Contribution to be made by each Employer with respect to an Employee who transfers from employment with one Employer as an Employee to employment with another Employer as an Employee.

6.7. Payment of Employer Contributions

Employer Contributions made for a Contribution Period shall be paid in cash or in qualifying employer securities, as defined in Section 407(d)(5) of ERISA, to the Trustee within the period of time required under the Code in order for the contribution to be deductible by the Employer in determining its Federal income taxes for the Plan Year.

6.8. Eligibility to Participate in Allocation

Each Employee shall be eligible to participate in the allocation of Employer Contributions beginning on the date he becomes, or again becomes, an Eligible Employee in accordance with the provisions of Article III. Notwithstanding the foregoing, no person shall be eligible to participate in the allocation of Profit-Sharing Contributions for a Contribution Period unless he is employed by an Employer or a Related Company on the last day of the Contribution Period; provided, however, that if the Plan would not otherwise meet the minimum coverage requirements of Section 410(b) of the Code in any Plan Year, the group of Employees eligible to participate in the allocation of Profit-Sharing Contributions shall be expanded to include the

minimum number of Employees who are not employed by an Employer or a Related Company on the last day of the Contribution Period that is necessary to meet the minimum coverage requirements. The Employees who become eligible to participate under the provisions of the immediately preceding clause shall be those Employees who have completed the greatest number of Hours of Service during the Contribution Period.

6.9. Vesting of Employer Contributions

A Participant's vested interest in his Employer Contributions Sub-Account shall be at all times 100 percent.

6.10. Election of Former Vesting Schedule

If the Sponsor adopts an amendment to the Plan that directly or indirectly affects the computation of a Participant's vested interest in his Employer Contributions Sub-Account, any Participant with three or more years of Vesting Service shall have a right to have his vested interest in his Employer Contributions Sub-Account continue to be determined under the vesting provisions in effect prior to the amendment rather than under the new vesting provisions, unless the vested interest of the Participant in his Employer Contributions Sub-Account under the Plan as amended is not at any time less than such vested interest determined without regard to the amendment. A Participant shall exercise his right under this Section by giving written notice of his exercise thereof to the Administrator within 60 days after the latest of (i) the date he receives notice of the amendment from the Administrator, (ii) the effective date of the amendment, or (iii) the date the amendment is adopted. Notwithstanding the foregoing, a Participant's vested interest in his Employer Contributions Sub-Account on the effective date of such an amendment shall not be less than his vested interest in his Employer Contributions Sub-Account immediately prior to the effective date of the amendment.

ARTICLE VII
LIMITATIONS ON CONTRIBUTIONS

7.1. Definitions

For purposes of this Article, the following terms have the following meanings:

(a) The "actual deferral percentage" with respect to an Eligible Employee for a particular Plan Year means the ratio of the Tax-Deferred Contributions made on his behalf for the Plan Year to his test compensation for the Plan Year; provided, however, that contributions made on a Participant's behalf for a Plan Year shall be included in determining his actual deferral percentage for such Plan Year only if the contributions are made to the Plan prior to the end of the 12-month period immediately following the Plan Year to which the contributions relate. The determination and treatment of the actual deferral percentage amounts for any Participant shall satisfy such other requirements as may be prescribed by the Secretary of the Treasury.

(b) The "aggregate limit" means the sum of (i) 125 percent of the greater of the average contribution percentage for eligible participants other than Highly Compensated Employees or the average actual deferral percentage for Eligible Employees other than Highly Compensated Employees and (ii) the lesser of 200 percent or two plus the lesser of such average contribution percentage or average actual deferral percentage, or, if it would result in a larger aggregate limit, the sum of (iii) 125 percent of the lesser of the average contribution percentage for eligible participants other than Highly Compensated Employees or the average actual deferral percentage for Eligible Employees other than Highly Compensated Employees and (iv) the lesser of 200 percent or two plus the greater of such average contribution percentage or average actual deferral percentage.

(c) The "annual addition" with respect to a Participant for a limitation year means the sum of the Tax-Deferred Contributions and Employer Contributions allocated to his Separate Account for the limitation year (including any excess contributions that are distributed pursuant to this Article), the employer contributions, employee contributions, and forfeitures allocated to his accounts for the limitation year under any other qualified defined contribution plan (whether or not terminated) maintained by an Employer or a Related Company concurrently with the Plan, and amounts described in Sections 415(1)(2) and 419A(d)(2) of the Code allocated to his account for the limitation year; provided, however, that the annual addition for limitation years beginning prior to January 1, 1987 shall not be recalculated to treat all employee contributions as annual additions.

(d) The "Code Section 402(g) limit" means the dollar limit imposed by Section 402(g)(1) of the Code or established by the Secretary of the Treasury pursuant to Section 402(g)(5) of the Code in effect on January 1 of the calendar year in which an Eligible Employee's taxable year begins.

(e) The "contribution percentage" with respect to an eligible participant for a particular Plan Year means the ratio of the matching contributions made to the Plan on his behalf for the Plan Year to his test compensation for such Plan Year, except that, to the extent permitted by regulations issued under Section 401(m) of the Code, the Sponsor may elect to take into account in computing the numerator of each eligible participant's contribution percentage the Tax-Deferred Contributions made to the Plan on his behalf for the Plan Year; provided, however, that any Tax-Deferred Contributions that were taken into account in computing the numerator of an eligible participant's actual deferral percentage may not be taken into account in computing the numerator of his contribution percentage; and provided, further, that contributions made by or on a Participant's behalf for a Plan Year shall be included in determining his contribution percentage for such Plan Year only if the contributions are made to the Plan prior to the end of the 12-month period immediately following the Plan Year to which the contributions relate. The determination and treatment of the contribution percentage amounts for any Participant shall satisfy such other requirements as may be prescribed by the Secretary of the Treasury.

(f) An "elective contribution" means any employer contribution made to a plan maintained by an Employer or any Related Company on behalf of a Participant in lieu of cash compensation pursuant to his written election to defer under any qualified CODA as described in Section 401(k) of the Code, any simplified employee pension cash or deferred arrangement as described in Section 402(h)(1)(B) of the Code, any eligible deferred compensation plan under Section 457 of the Code, or any plan as described in Section 501(c)(18) of the Code, and any contribution made on behalf of the Participant by an Employer or a Related Company for the purchase of an annuity contract under Section 403(b) of the Code pursuant to a salary reduction agreement.

(g) An "eligible participant" means any Employee who is eligible to have Tax-Deferred Contributions made on his behalf (if Tax-Deferred Contributions are taken into account in computing contribution percentages) or to participate in the allocation of matching contributions.

(h) An "excess deferral" with respect to a Participant means that portion of a Participant's Tax-Deferred Contributions that when added to amounts deferred under other plans or arrangements described in Sections 401(k), 408(k), or 403(b) of the Code, would exceed the Code Section 402(g) limit and is includable in the Participant's gross income under Section 402(g) of the Code.

(i) A "family member" of an Employee means the Employee's spouse, his lineal ascendants, his lineal descendants, and the spouses of such lineal ascendants and descendants.

(j) A "limitation year" means the calendar year.

(k) A "matching contribution" means any employer contribution allocated to an Eligible Employee's account under the Plan or any other plan of an Employer or a Related

Company solely on account of elective contributions made on his behalf or employee contributions made by him.

(l) The "test compensation" of an Eligible Employee for a Plan Year means compensation as defined in Section 414(s) of the Code and regulations issued thereunder, limited, however, to (1) $200,000 for Plan Years beginning prior to January 1, 1994, or (2) $150,000 for Plan Years beginning on or after January 1, 1994 (subject to adjustment annually as provided in Section 401(a)(17)(B) and Section 415(d) of the Code; provided, however, that the dollar increase in effect on January 1 of any calendar year, if any, is effective for Plan Years beginning in such calendar year). If the test compensation of a Participant is determined over a period of time that contains fewer than 12 calendar months, then the annual compensation limitation described above shall be adjusted with respect to that Participant by multiplying the annual compensation limitation in effect for the Plan Year by a fraction the numerator of which is the number of full months in the period and the denominator of which is 12; provided, however, that no proration is required for a Participant who is covered under the Plan for less than one full Plan Year if the formula for allocations is based on Compensation for a period of at least 12 months. In determining the test compensation, for purposes of applying the annual compensation limitation described above, of a Participant who is a five-percent owner or among the ten Highly Compensated Employees receiving the greatest test compensation for the limitation year, the test compensation of the Participant's spouse and of his lineal descendants who have not attained age 19 as of the close of the limitation year shall be included as test compensation of the Participant for the limitation year. If as a result of applying the family aggregation rule described in the preceding sentence the annual compensation limitation would be exceeded, the limitation shall be prorated among the affected family members in proportion to each member's test compensation as determined prior to application of the family aggregation rules.

7.2. Code Section 402 (g) Limit

In no event shall the amount of the Tax-Deferred Contributions made on behalf of an Eligible Employee for his taxable year, when aggregated with any elective contributions made on behalf of the Eligible Employee under any other plan of an Employer or a Related Company for his taxable year, exceed the Code Section 402(g) limit. In the event that the Administrator determines that the reduction percentage elected by an Eligible Employee will result in his exceeding the Code Section 402(g) limit, the Administrator may adjust the reduction authorization of such Eligible Employee by reducing the percentage of his Tax-Deferred Contributions to such smaller percentage that will result in the Code Section 402(g) limit not being exceeded. If the Administrator determines that the Tax-Deferred Contributions made on behalf of an Eligible Employee would exceed the Code Section 402(g) limit for his taxable year, the Tax-Deferred Contributions for such Participant shall be automatically suspended for the remainder, if any, of such taxable year.

If an Employer notifies the Administrator that the Code Section 402(g) limit has nevertheless been exceeded by an Eligible Employee for his taxable year, the Tax-Deferred Contributions

that, when aggregated with elective contributions made on behalf of the Eligible Employee under any other plan of an Employer or a Related Company, would exceed the Code Section 402(g) limit, plus any income and minus any losses attributable thereto, shall be distributed to the Eligible Employee no later than the April 15 immediately following such taxable year. Any Tax-Deferred Contributions that are distributed to an Eligible Employee in accordance with this Section shall not be taken into account in computing the Eligible Employee's actual deferral percentage for the Plan Year in which the Tax-Deferred Contributions were made, unless the Eligible Employee is a Highly Compensated Employee.

If an amount of Tax-Deferred Contributions is distributed to a Participant in accordance with this Section, matching contributions that are attributable solely to the distributed Tax-Deferred Contributions, plus any income and minus any losses attributable thereto, shall be forfeited by the Participant. Any such forfeited amounts shall be applied against the Employer Contribution obligations for the Plan Year of the Employer for which the Participant last performed services as an Employee. Notwithstanding the foregoing, however, should the amount of all such forfeitures for any Plan Year with respect to any Employer exceed the amount of such Employer's Employer Contribution obligation for the Plan Year, the excess amount of such forfeitures shall be held unallocated in a suspense account established with respect to the Employer and shall for all Plan purposes be applied against the Employer's Employer Contribution obligations for the following Plan Year.

7.3. Distribution of Excess Deferrals

Notwithstanding any other provision of the Plan to the contrary, if a Participant notifies the Administrator in writing no later than the March 1 following the close of the Participant's taxable year that excess deferrals have been made on his behalf under the Plan for such taxable year, the excess deferrals, plus any income and minus any losses attributable thereto, shall be distributed to the Participant no later than the April 15 immediately following such taxable year. Any Tax-Deferred Contributions that are distributed to a Participant in accordance with this Section shall nevertheless be taken into account in computing the Participant's actual deferral percentage for the Plan Year in which the Tax-Deferred Contributions were made. If an amount of Tax-Deferred Contributions is distributed to a Participant in accordance with this Section, matching contributions that are attributable solely to the distributed Tax-Deferred Contributions, plus any income and minus any losses attributable thereto, shall be forfeited by the Participant. Any such forfeited amounts shall be applied against the Employer Contribution obligations for the Plan Year of the Employer for which the Participant last performed services as an Employee. Notwithstanding the foregoing, however, should the amount of all such forfeitures for any Plan Year with respect to any Employer exceed the amount of such Employer's Employer Contribution obligation for the Plan Year, the excess amount of such forfeitures shall be held unallocated in a suspense account established with respect to the Employer and shall for all Plan purposes be applied against the Employer's Employer Contribution obligations for the following Plan Year.

7.4. Limitation on Tax-Deferred Contributions of Highly Compensated Employees

Notwithstanding any other provision of the Plan to the contrary, the Tax-Deferred Contributions made with respect to a Plan Year on behalf of Eligible Employees who are Highly Compensated Employees may not result in an average actual deferral percentage for such Eligible Employees that exceeds the greater of:

(a) a percentage that is equal to 125 percent of the average actual deferral percentage for all other Eligible Employees; or

(b) a percentage that is not more than 200 percent of the average actual deferral percentage for all other Eligible Employees and that is not more than two percentage points higher than the average actual deferral percentage for all other Eligible Employees.

In order to assure that the limitation contained herein is not exceeded with respect to a Plan Year, the Administrator is authorized to suspend completely further Tax-Deferred Contributions on behalf of Highly Compensated Employees for any remaining portion of a Plan Year or to adjust the projected actual deferral percentages of Highly Compensated Employees by reducing their percentage elections with respect to Tax-Deferred Contributions for any remaining portion of a Plan Year to such smaller percentages that will result in the limitation set forth above not being exceeded. In the event of any such suspension or reduction, Highly Compensated Employees affected thereby shall be notified of the reduction or suspension as soon as possible and shall be given an opportunity to make a new Tax-Deferred Contribution election to be effective the first day of the next following Plan Year. In the absence of such an election, the election in effect immediately prior to the suspension or adjustment described above shall be reinstated as of the first day of the next following Plan Year.

For purposes of applying the limitation contained in this Section, the Tax-Deferred Contributions and test compensation of any Eligible Employee who is a family member of another Eligible Employee who is a five percent owner or among the ten Highly Compensated Employees receiving the greatest test compensation for the Plan Year shall be aggregated with the Tax-Deferred Contributions and test compensation of such other Eligible Employee, and such family member shall not be considered an Eligible Employee for purposes of determining the average actual deferral percentage for all other Eligible Employees.

In determining the actual deferral percentage for any Eligible Employee who is a Highly Compensated Employee for the Plan Year, elective contributions made to his accounts under any other plan of an Employer or a Related Company shall be treated as if all such contributions were made to the Plan; provided, however, that if such a plan has a plan year different from the Plan Year, any such contributions made to the Highly Compensated Employee's accounts under the plan for the plan year ending with or within the same calendar year as the Plan Year shall be treated as if such contributions were made to the Plan. Notwithstanding the foregoing, such contributions shall not be treated as if they were made to the Plan if regulations issued under Section 401(k) of the Code do not permit such plan to be aggregated with the Plan.

If one or more plans of an Employer or Related Company are aggregated with the Plan for purposes of satisfying the requirements of Section 401(a)(4) or 410(b) of the Code, then actual deferral percentages under the Plan shall be calculated as if the Plan and such one or more other plans were a single plan. For Plan Years beginning after December 31, 1991, plans may be aggregated to satisfy Section 401(k) of the Code only if they have the same plan year.

The Administrator shall maintain records sufficient to show that the limitation contained in this Section was not exceeded with respect to any Plan Year.

7.5. Distribution of Excess Tax-Deferred Contributions

Notwithstanding any other provision of the Plan to the contrary, in the event that the limitation contained in Section 7.4 is exceeded in any Plan Year, the Tax-Deferred Contributions made with respect to a Highly Compensated Employee that exceed the maximum amount permitted to be contributed to the Plan on his behalf under Section 7.4, plus any income and minus any losses attributable thereto, shall be distributed to the Highly Compensated Employee prior to the end of the next succeeding Plan Year. If excess amounts are attributable to Participants aggregated under the family aggregation rules described in Section 7.4, the excess shall be allocated among family members in proportion to the Tax-Deferred Contributions made with respect to each family member. If such excess amounts are distributed more than 2 1/2 months after the last day of the Plan Year for which the excess occurred, an excise tax may be imposed under Section 4979 of the Code on the Employer maintaining the Plan with respect to such amounts.

The maximum amount permitted to be contributed to the Plan on a Highly Compensated Employee's behalf under Section 7.4 shall be determined by reducing Tax-Deferred Contributions made on behalf of Highly Compensated Employees in order of their actual deferral percentages beginning with the highest of such percentages. The determination of the amount of excess Tax-Deferred Contributions shall be made after application of Section 7.3, if applicable.

If an amount of Tax-Deferred Contributions is distributed to a Participant in accordance with this Section, matching contributions that are attributable solely to the distributed Tax-Deferred Contributions, plus any income and minus any losses attributable thereto, shall be forfeited by the Participant. Any such forfeited amounts shall be applied against the Employer Contribution obligations for the Plan Year of the Employer for which the Participant last performed services as an Employee.

Notwithstanding the foregoing, however, should the amount of all such forfeitures for any Plan Year with respect to any Employer exceed the amount of such Employer's Employer Contribution obligation for the Plan Year, the excess amount of such forfeitures shall be held unallocated in a suspense account established with respect to the Employer and shall for all Plan purposes be applied against the Employer's Employer Contribution obligations for the following Plan Year.

7.6. Limitation on Matching Contributions of Highly Compensated Employees

Notwithstanding any other provision of the Plan to the contrary, the matching contributions made with respect to a Plan Year on behalf of eligible participants who are Highly Compensated Employees may not result in an average contribution percentage for such eligible participants that exceeds the greater of:

(a) a percentage that is equal to 125 percent of the average contribution percentage for all other eligible participants; or

(b) a percentage that is not more than 200 percent of the average contribution percentage for all other eligible participants and that is not more than two percentage points higher than the average contribution percentage for all other eligible participants.

For purposes of applying the limitation contained in this Section, the matching contributions, Tax-Deferred Contributions (to the extent that such Tax-Deferred Contributions are taken into account in computing contribution percentages), and test compensation of any eligible participant who is a family member of another eligible participant who is a five percent owner or among the ten Highly Compensated Employees receiving the greatest test compensation for the Plan Year shall be aggregated with the matching contributions, Tax-Deferred Contributions, and test compensation of such other eligible participant, and such family member shall not be considered an eligible participant for purposes of determining the average contribution percentage for all other eligible participants.

In determining the contribution percentage for any eligible participant who is a Highly Compensated Employee for the Plan Year, matching contributions, employee contributions, and elective contributions (to the extent that elective contributions are taken into account in computing contribution percentages) made to his accounts under any other plan of an Employer or a Related Company shall be treated as if all such contributions were made to the Plan; provided, however, that if such a plan has a plan year different from the Plan Year, any such contributions made to the Highly Compensated Employee's accounts under the plan for the plan year ending with or within the same calendar year as the Plan Year shall be treated as if such contributions were made to the Plan. Notwithstanding the foregoing, such contributions shall not be treated as if they were made to the Plan if regulations issued under Section 401(m) of the Code do not permit such plan to be aggregated with the Plan.

If one or more plans of an Employer or a Related Company are aggregated with the Plan for purposes of satisfying the requirements of Section 401(a)(4) or 410(b) of the Code, the contribution percentages under the Plan shall be calculated as if the Plan and such one or more other plans were a single plan.

For Plan Years beginning after December 31, 1989, plans may be aggregated to satisfy Section 401(m) of the Code only if they have the same plan year.

The Administrator shall maintain records sufficient to show that the limitation contained in this Section was not exceeded with respect to any Plan Year and the amount of the elective contributions taken into account in computing contribution percentages for any Plan Year.

7.7. Distribution of Excess Contributions

Notwithstanding any other provision of the Plan to the contrary, in the event that the limitation contained in Section 7.6 is exceeded in any Plan Year, the matching contributions made on behalf of a Highly Compensated Employee that exceed the maximum amount permitted to be contributed to the Plan on behalf of such Highly Compensated Employee under Section 7.6, plus any income and minus any losses attributable thereto, shall be distributed to the Participant prior to the end of the next succeeding Plan Year. If excess amounts are attributable to Participants aggregated under the family aggregation rules described in Section 7.5, the excess shall be allocated among family members in proportion to the matching contributions made with respect to each family member. If such excess amounts are distributed more than 2 1/2 months after the last day of the Plan Year for which the excess occurred, an excise tax may be imposed under Section 4979 of the Code on the Employer maintaining the Plan with respect to such amounts.

The maximum amount permitted to be contributed to the Plan on behalf of a Highly Compensated Employee under Section 7.6 shall be determined by reducing matching contributions made on behalf of Highly Compensated Employees in order of their contribution percentages beginning with the highest of such percentages.

The determination of the amount of excess matching contributions shall be made after application of Section 7.3, if applicable, and after application of Section 7.5, if applicable.

7.8. Multiple Use Limitation

Notwithstanding any other provision of the Plan to the contrary, the following multiple use limitation as required under Section 401(m) of the Code shall apply: the sum of the average actual deferral percentage for Eligible Employees who are Highly Compensated Employees and the average contribution percentage for eligible participants who are Highly Compensated Employees may not exceed the aggregate limit. In the event that, after satisfaction of Section 7.5 and Section 7.7, it is determined that contributions under the Plan fail to satisfy the multiple use limitation contained herein, the multiple use limitation shall be satisfied by further reducing the actual deferral percentages of Eligible Employees who are Highly Compensated Employees (beginning with the highest such percentage) to the extent necessary to eliminate the excess, with such further reductions to be treated as excess Tax-Deferred Contributions and disposed of as provided in Section 7.5, or in an alternative manner, consistently applied, that may be permitted by regulations issued under Section 401(m) of the Code.

7.9. Determination of Income or Loss

The income or loss attributable to excess contributions that are distributed pursuant to this Article shall be determined for the preceding Plan Year under the method otherwise used for allocating income or loss to Participant's Separate Accounts.

7.10. Code Section 415 Limitations on Crediting of Contributions and Forfeitures

Notwithstanding any other provision of the Plan to the contrary, the annual addition with respect to a Participant for a limitation year shall in no event exceed the lesser of (i) $30,000 (adjusted as provided in Section 415(d) of the Code, with the first adjustment being made for limitation years beginning on or after January 1, 1996) or (ii) 25 percent of the Participant's compensation, as defined in Section 415(c)(3) of the Code and regulations issued thereunder, for the limitation year. If the annual addition to the Separate Account of a Participant in any limitation year would otherwise exceed the amount that may be applied for his benefit under the limitation contained in this Section, the limitation shall be satisfied by reducing contributions made on behalf of the Participant to the extent necessary in the following order:

Tax-Deferred Contributions made on the Participant's behalf for the limitation year and the matching contributions attributable thereto, if any, shall be reduced pro rata.

Employer Contributions (other than matching contributions) otherwise allocable to the Participant's Separate Account for the limitation year shall be reduced.

The amount of any reduction of Tax-Deferred Contributions (plus any income attributable thereto) shall be returned to the Participant. The amount of any reduction of Employer Contributions shall be deemed a forfeiture for the limitation year. Amounts deemed to be forfeitures under this Section shall be held unallocated in a suspense account established for the limitation year and shall be applied against the Employer's contribution obligation for the next following limitation year (and succeeding limitation years, as necessary). If a suspense account is in existence at any time during a limitation year, all amounts in the suspense account must be allocated to Participants' Separate Accounts (subject to the limitations contained herein) before any further Tax-Deferred Contributions or Employer Contributions may be made to the Plan on behalf of Participants. No suspense account established hereunder shall share in any increase or decrease in the net worth of the Trust. For purposes of this Article, excesses shall result only from the allocation of forfeitures, a reasonable error in estimating a Participant's annual compensation (as defined in Section 415(c)(3) of the Code and regulations issued thereunder), a reasonable error in determining the amount of Tax-Deferred Contributions that may be made with respect to any Participant under the limits of Section 415 of the Code, or other limited facts and circumstances that justify the availability of the provisions set forth above.

7.11. Coverage Under Other Qualified Defined Contribution Plan

If a Participant is covered by any other qualified defined contribution plan (whether or not terminated) maintained by an Employer or a Related Company concurrently with the Plan, and if the annual addition for the limitation year would otherwise exceed the amount that may be applied for the Participant's benefit under the limitation contained in Section 7.10, such excess shall be reduced first by returning the employee contributions made by the Participant for the limitation year under all of the defined contribution plans other than the Plan and the income attributable thereto to the extent necessary. If the limitation contained in Section 7.10 is still not satisfied after returning all of the employee contributions made by the Participant under all such

other plans, the excess shall be reduced by returning the elective contributions made on the Participant's behalf for the limitation year under all such other plans and the income attributable thereto to the extent necessary on a pro rata basis among all of such plans. If the limitation contained in Section 7.10 is still not satisfied after returning all of the elective contributions made on the Participant's behalf under all such other plans, the procedure set forth in Section 7.10 shall be invoked to eliminate any such excess. If the limitation contained in Section 7.10 is still not satisfied after invocation of the procedure set forth in Section 7.10, the portion of the employer contributions and of forfeitures for the limitation year under all such other plans that has been allocated to the Participant thereunder, but which exceeds the limitation set forth in Section 7.10, shall be deemed a forfeiture for the limitation year and shall be disposed of as provided in such other plans; provided, however, that if the Participant is covered by a money purchase pension plan, the forfeiture shall be effected first under any other defined contribution plan that is not a money purchase pension plan and, if the limitation is still not satisfied, then under such money purchase pension plan.

7.12. Coverage Under Qualified Defined Benefit Plan

If a Participant in the Plan is also covered by a qualified defined benefit plan (whether or not terminated) maintained by an Employer or a Related Company, in no event shall the sum of the defined benefit plan fraction (as defined in Section 415(e)(2) of the Code) and the defined contribution plan fraction (as defined in Section 415(e)(3) of the Code) exceed 1.0 in any limitation year. If, before October 3, 1973, the Participant was an active participant in a qualified defined benefit plan maintained by an Employer or a Related Company and otherwise satisfies the requirements of Section 2004(d)(2) of ERISA, then for purposes of applying this Section, the defined benefit plan fraction shall not exceed 1.0. If the Plan satisfied the applicable requirements of Section 415 of the Code as in effect for all limitation years beginning before January 1, 1987, an amount shall be subtracted from the numerator of the defined contribution plan fraction (not exceeding such numerator) as prescribed by the Secretary of the Treasury so that the sum of the defined benefit plan fraction and the defined contribution plan fraction computed under Section 415(e)(1) of the Code, as revised by the Tax Reform Act of 1986, does not exceed 1.0 for such limitation year. In the event the special limitation contained in this Section is exceeded, the benefits otherwise payable to the Participant under any such qualified defined benefit plan shall be reduced to the extent necessary to meet such limitation.

7.13. Scope of Limitations

The limitations contained in Sections 7.10, 7.11, and 7.12 shall be applicable only with respect to benefits provided pursuant to defined contribution plans and defined benefit plans described in Section 415(k) of the Code.

ARTICLE VIII
TRUST FUNDS AND SEPARATE ACCOUNTS

8.1. General Fund

The Trustee shall maintain a General Fund as required to hold and administer any assets of the Trust that are not allocated among the Investment Funds as provided in the Plan or the Trust Agreement. The General Fund shall be held and administered as a separate common trust fund. The interest of each Participant or Beneficiary under the Plan in the General Fund shall be an undivided interest. The General Fund may be invested in whole or in part in equity securities issued by an Employer or a Related Company that are publicly traded and are "qualifying employer securities" as defined in Section 407(d)(5) of ERISA.

8.2. Investment Funds

The Sponsor shall determine the number and type of Investment Funds and select the investments for such Investment Funds. The Sponsor shall communicate the same and any changes therein in writing to the Administrator and the Trustee. Each Investment Fund shall be held and administered as a separate common trust fund. The interest of each Participant or Beneficiary under the Plan in any Investment Fund shall be an undivided interest.

The Sponsor may determine to offer one or more Investment Funds that are invested in whole or in part in equity securities issued by an Employer or a Related Company that are publicly traded and are "qualifying employer securities" as defined in Section 407(d)(5) of ERISA.

8.3. Loan Investment Fund

If a loan from the Plan to a Participant is approved in accordance with the provisions of Article XII, the Sponsor shall direct the establishment and maintenance of a loan Investment Fund in the Participant's name. The assets of the loan Investment Fund shall be held as a separate trust fund. A Participant's loan Investment Fund shall be invested in the note reflecting the loan that is executed by the Participant in accordance with the provisions of Article XII. Notwithstanding any other provision of the Plan to the contrary, income received with respect to a Participant's loan Investment Fund shall be allocated and the loan Investment Fund shall be administered as provided in Article XII.

8.4. Income on Trust

Any dividends, interest, distributions, or other income received by the Trustee with respect to any Trust Fund maintained hereunder shall be allocated by the Trustee to the Trust Fund for which the income was received.

8.5. Separate Accounts

As of the first date a contribution is made by or on behalf of an Employee, there shall be established a Separate Account in his name reflecting his interest in the Trust. Each Separate

Account shall be maintained and administered for each Participant and Beneficiary in accordance with the provisions of the Plan. The balance of each Separate Account shall be the balance of the account after all credits and charges thereto, for and as of such date, have been made as provided herein.

8.6. Sub-Accounts

A Participant's Separate Account shall be divided into individual Sub-Accounts reflecting the portion of the Participant's Separate Account that is derived from Tax-Deferred Contributions, Rollover Contributions, or Employer Contributions. Each Sub-Account shall reflect separately contributions allocated to each Trust Fund maintained hereunder and the earnings and losses attributable thereto. Such other Sub-Accounts may be established as are necessary or appropriate to reflect a Participant's interest in the Trust.

ARTICLE IX
LIFE INSURANCE CONTRACTS

9.1. No Life Insurance Contracts

There shall be no life insurance contracts purchased under the Plan.

ARTICLE X
DEPOSIT AND INVESTMENT OF CONTRIBUTIONS

10.1. Future Contribution Investment Elections

Each Eligible Employee shall make an investment election in the manner and form prescribed by the Administrator directing the manner in which his Tax-Deferred Contributions, Rollover Contributions, and Employer Contributions shall be invested. An Eligible Employee's investment election shall specify the percentage, in the percentage increments prescribed by the Administrator, of such contributions that shall be allocated to one or more of the Investment Funds with the sum of such percentages equaling 100 percent. The investment election by a Participant shall remain in effect until his entire interest under the Plan is distributed or forfeited in accordance with the provisions of the Plan or until he files a change of investment election with the Administrator, in such form as the Administrator shall prescribe. A Participant's change of investment election may be made effective as of the date or dates prescribed by the Administrator.

10.2. Deposit of Contributions

All Tax-Deferred Contributions, Rollover Contributions, and Employer Contributions shall be deposited in the Trust and allocated among the Investment Funds in accordance with the Participant's currently effective investment election; provided, however, that any contributions made to the Plan in qualifying employer securities shall be allocated to the Employer securities Investment Fund established by the Sponsor, pending directions to the Administrator regarding their future investment. If no investment election is on file with the Administrator at the time contributions are to be deposited to a Participant's Separate Account, the Participant shall be notified and an investment election form shall be provided to him. Until such Participant shall make an effective election under this Section, his contributions shall be allocated among the Investment Funds as directed by the Administrator.

10.3. Election to Transfer Between Funds

A Participant may elect to transfer investments from any Investment Fund to any other Investment Fund. The Participant's transfer election shall specify either (i) a percentage, in the percentage increments prescribed by the Administrator, of the amount eligible for transfer, which percentage may not exceed 100 percent, or (ii) a dollar amount that is to be transferred. Subject to any restrictions pertaining to a particular Investment Fund, a Participant's transfer election may be made effective as of the date or dates prescribed by the Administrator.

ARTICLE XI
CREDITING AND VALUING SEPARATE ACCOUNTS

11.1. Crediting Separate Accounts

All contributions made under the provisions of the Plan shall be credited to Separate Accounts in the Trust Funds by the Trustee, in accordance with procedures established in writing by the Administrator, either when received or on the succeeding Valuation Date after valuation of the Trust Fund has been completed for such Valuation Date as provided in Section 11.2, as shall be determined by the Administrator.

11.2. Valuing Separate Accounts

Separate Accounts in the Trust Funds shall be valued by the Trustee on the Valuation Date, in accordance with procedures established in writing by the Administrator, either in the manner adopted by the Trustee and approved by the Administrator or in the manner set forth in Section 11.3 as Plan valuation procedures, as determined by the Administrator.

11.3. Plan Valuation Procedures

With respect to the Trust Funds, the Administrator may determine that the following valuation procedures shall be applied. As of each Valuation Date hereunder, the portion of any Separate Accounts in a Trust Fund shall be adjusted to reflect any increase or decrease in the value of the Trust Fund for the period of time occurring since the immediately preceding Valuation Date for the Trust Fund (the "valuation period") in the following manner:

(a) First, the value of the Trust Fund shall be determined by valuing all of the assets of the Trust Fund at fair market value.

(b) Next, the net increase or decrease in the value of the Trust Fund attributable to net income and all profits and losses, realized and unrealized, during the valuation period shall be determined on the basis of the valuation under paragraph (a) taking into account appropriate adjustments for contributions, loan payments, and transfers to and distributions, withdrawals, loans, and transfers from such Trust Fund during the valuation period.

(c) Finally, the net increase or decrease in the value of the Trust Fund shall be allocated among Separate Accounts in the Trust Fund in the ratio of the balance of the portion of such Separate Account in the Trust Fund as of the preceding Valuation Date less any distributions, withdrawals, loans, and transfers from such Separate Account balance in the Trust Fund since the Valuation Date to the aggregate balances of the portions of all Separate Accounts in the Trust Fund similarly adjusted, and each Separate Account in the Trust Fund shall be credited or charged with the amount of its allocated share. Notwithstanding the foregoing, the Administrator may adopt such accounting procedures as it considers appropriate and equitable to establish a proportionate crediting of net increase or decrease in the value of the Trust Fund for contributions, loan payments, and transfers to and distributions, withdrawals, loans, and

transfers from such Trust Fund made by or on behalf of a Participant during the valuation period.

11.4. Finality of Determinations

The Trustee shall have exclusive responsibility for determining the balance of each Separate Account maintained hereunder. The Trustee's determinations thereof shall be conclusive upon all interested parties.

11.5. Notification

Within a reasonable period of time after the end of each Plan Year, the Administrator shall notify each Participant and Beneficiary of the balances of his Separate Account and Sub-Accounts as of a Valuation Date during the Plan Year.

ARTICLE XII
LOANS

12.1. Application for Loan

A Participant who is a party in interest may make written application to the Administrator for a loan from his Separate Account.

As collateral for any loan granted hereunder, the Participant shall grant to the Plan a security interest in his vested interest under the Plan equal to the amount of the loan; provided, however, that in no event may the security interest exceed 50 percent of the Participant's vested interest under the Plan determined as of the date as of which the loan is originated in accordance with Plan provisions. In the case of a Participant who is an active employee, the Participant also shall enter into an agreement to repay the loan by payroll withholding. No loan in excess of 50 percent of the Participant's vested interest under the Plan shall be made from the Plan. Loans shall not be made available to Highly Compensated Employees in an amount greater than the amount made available to other employees.

A loan shall not be granted unless the Participant consents in writing to the charging of his Separate Account for unpaid principal and interest amounts in the event the loan is declared to be in default. A Participant's spouse must consent in writing to any loan hereunder. Any spousal consent given pursuant to this Section must acknowledge the effect of the loan and must be witnessed by a Plan representative or a notary public. Such spousal consent shall be binding with respect to the consenting spouse and any subsequent spouse with respect to the loan. A new spousal consent shall be required if the Participant's Separate Account is used for security in any renegotiation, extension, renewal, or other revision of the loan.

12.2. Reduction of Account Upon Distribution

Notwithstanding any other provision of the Plan, the amount of a Participant's Separate Account that is distributable to the Participant or his Beneficiary under Article XIII or XV shall be reduced by the portion of his vested interest that is held by the Plan as security for any loan outstanding to the Participant, provided that the reduction is used to repay the loan. If distribution is made because of the Participant's death prior to the commencement of distribution of his Separate Account and less than 100 percent of the Participant's vested interest in his Separate Account (determined without regard to the preceding sentence) is payable to his surviving spouse, then the balance of the Participant's vested interest in his Separate Account shall be adjusted by reducing the vested account balance by the amount of the security used to repay the loan, as provided in the preceding sentence, prior to determining the amount of the benefit payable to the surviving spouse.

12.3. Requirements to Prevent a Taxable Distribution

Notwithstanding any other provision of the Plan to the contrary, the following terms and conditions shall apply to any loan made to a Participant under this Article:

(a) The interest rate on any loan to a Participant shall be a reasonable interest rate commensurate with current interest rates charged for loans made under similar circumstances by persons in the business of lending money.

(b) The amount of any loan to a Participant (when added to the outstanding balance of all other loans to the Participant from the Plan or any other plan maintained by an Employer or a Related Company) shall not exceed the lesser of:

(i) $50,000, reduced by the excess, if any, of the highest outstanding balance of any other loan to the Participant from the Plan or any other plan maintained by an Employer or a Related Company during the preceding 12-month period over the outstanding balance of such loans on the date a loan is made hereunder; or

(ii) 50 percent of the vested portions of the Participant's Separate Account and his vested interest under all other plans maintained by an Employer or a Related Company.

(c) The term of any loan to a Participant shall be no greater than five years, except in the case of a loan used to acquire any dwelling unit which within a reasonable period of time is to be used (determined at the time the loan is made) as a principal residence of the Participant.

(d) Except as otherwise permitted under Treasury regulations, substantially level amortization shall be required over the term of the loan with payments made not less frequently than quarterly.

12.4. Administration of Loan Investment Fund

Upon approval of a loan to a Participant, the Administrator shall direct the Trustee to transfer an amount equal to the loan amount from the Investment Funds in which it is invested, as directed by the Administrator, to the loan Investment Fund established in the Participant's name. Any loan approved by the Administrator shall be made to the Participant out of the Participant's loan Investment Fund. All principal and interest paid by the Participant on a loan made under this Article shall be deposited to his Separate Account and shall be allocated upon receipt among the Investment Funds in accordance with the Participant's currently effective investment election. The balance of the Participant's loan Investment Fund shall be decreased by the amount of principal payments and the loan Investment Fund shall be terminated when the loan has been repaid in full.

12.5. Default

If a Participant fails to make or cause to be made, any payment required under the terms of the loan within 90 days following the date on which such payment shall become due or there is an outstanding principal balance existing on a loan after the last scheduled repayment date, the Administrator may direct the Trustee to declare the loan to be in default, and the entire unpaid balance of such loan, together with accrued interest, shall be immediately due and payable. In

any such event, if such balance and interest thereon is not then paid, the Trustee shall charge the Separate Account of the borrower with the amount of such balance and interest as of the earliest date a distribution may be made from the Plan to the borrower without adversely affecting the tax qualification of the Plan or of the cash or deferred arrangement.

12.6. Special Rules Applicable to Loans

Any loan made hereunder shall be subject to the following rules:

(a) Loans limited to Eligible Employees: No loans shall be made to an Employee who makes a Rollover Contribution in accordance with Article IV, but who is not an Eligible Employee as provided in Article III.

(b) Minimum Loan Amount: A Participant may not request a loan for less than $1,000.

(c) Maximum Number of Outstanding Loans: A Participant with an outstanding loan may not apply for another loan until the existing loan is paid in full and may not refinance an existing loan or attain a second loan for the purpose of paying off the existing loan. A Participant may not apply for more than one loan during the Plan Year. The provisions of this paragraph shall not apply to any loans made prior to the effective date of this amendment and restatement; provided, however, that a Participant may not apply for a new loan hereunder until all outstanding loans made to the Participant prior to the effective date of this amendment and restatement have been paid in full.

(d) Maximum Period for Real Estate Loans: The term of any loan to a Participant that is used to acquire any dwelling unit which within a reasonable period of time is to be used (determined at the time the loan is made) as a principal residence of the Participant shall be no greater than ten years.

(e) Pre-Payment Without Penalty: A Participant may pre-pay the balance of any loan hereunder prior to the date it is due without penalty.

(f) Affect of Termination of Employment: Upon a Participant's termination of employment, the balance of any outstanding loan hereunder shall immediately become due and owing.

12.7. Loans Granted Prior to Amendment

Notwithstanding any other provision of this Article to the contrary, any loan made under the provisions of the Plan as in effect prior to this amendment and restatement shall remain outstanding until repaid in accordance with its terms or the otherwise applicable Plan provisions.

ARTICLE XIII
WITHDRAWALS WHILE EMPLOYED

13.1. Withdrawals From ESOP Sub-Account

A Participant who is employed by an Employer or a Related Company and who has attained age 55 and completed 10 or more years of participation in the Alpha Industries, Inc. Employee Stock Ownership Plan ("ESOP") and/or this Plan (a "qualified participant") may elect in writing to make a cash withdrawal, or a withdrawal in the form of a qualified joint and survivor annuity as provided in Article XVI, from his ESOP Sub-Account. The maximum amount that a qualified participant may withdrawal pursuant to this Section 13.1 is 25 percent of the value of his ESOP Sub-Account attributable to employer securities acquired by the ESOP after 1986. The portion of the qualified participant's ESOP Sub-Account attributable to employer securities acquired by the ESOP after 1986 shall be determined by multiplying the number of shares of employer securities held in the ESOP Sub-Account by a fraction, the numerator of which is the number of shares acquired by the ESOP after 1986 and the denominator of which is the total number of shares held by the ESOP or this Plan on the date the individual became a qualified participant. A withdrawal under this Section may be made at any time within 90 days after the last day of each Plan Year during the 6-year period beginning with the Plan Year in which the qualified participant first becomes a qualified participant. The minimum total withdrawal that a Participant may make under this Section 13.1 is $500.

13.2. Withdrawals of Rollover Contributions

A Participant who is employed by an Employer or a Related Company and has attained age 59 1/2 or is determined by the Administrator to have incurred a hardship as defined in this Article may elect in writing, subject to the limitations and conditions prescribed in this Article, to make a cash withdrawal or a withdrawal in the form of a qualified joint and survivor annuity as provided in Article XVI from his Rollover Contributions Sub-Account.

13.3. Withdrawals of Employer Contributions

A Participant who is employed by an Employer or a Related Company and has attained age 59 1/2 or is determined by the Administrator to have incurred a hardship as defined in this Article may elect in writing, subject to the limitations and conditions prescribed in this Article to make a cash withdrawal or a withdrawal in the form of a qualified joint and survivor annuity as provided in Article XVI from his vested interest in his Employer Contributions Sub-Account.

13.4. Withdrawals of Tax-Deferred Contributions

A Participant who is employed by an Employer or a Related Company and who has attained age 59 1/2 or is determined by the Administrator to have incurred a hardship as defined in this Article may elect in writing, subject to the limitations and conditions prescribed in this Article, to make a cash withdrawal or a withdrawal in the form of a qualified joint and survivor annuity as provided in Article XVI from his Tax-Deferred Contributions Sub-Account. The maximum amount that a Participant may withdraw pursuant to this Section because of a hardship is the

balance of his Tax-Deferred Contributions Sub-Account, exclusive of any earnings credited to such Sub-Account as of a date that is after December 31, 1988.

13.5. Limitations on Withdrawals Other than Hardship Withdrawals

Withdrawals made pursuant to this Article, other than hardship withdrawals, shall be subject to the following conditions and limitations:

A Participant must file a written withdrawal application with the Administrator such number of days prior to the date as of which it is to be effective as the Administrator shall prescribe.

Withdrawals may be made effective as soon as reasonably practicable following the Administrator's receipt of the Participant's directions.
A Participant's spouse must consent in writing to any withdrawal hereunder.

13.6. Conditions and Limitations on Hardship Withdrawals

A Participant must file a written application for a hardship withdrawal with the Administrator such number of days prior to the date as of which it is to be effective as the Administrator may prescribe. Hardship withdrawals may be made effective as soon as reasonably practicable following the Administrator's receipt of the Participant's directions. A Participant's spouse must consent to any withdrawal hereunder. The Administrator shall grant a hardship withdrawal only if it determines that the withdrawal is necessary to meet an immediate and heavy financial need of the Participant. An immediate and heavy financial need of the Participant means a financial need on account of:

(a) expenses previously incurred by or necessary to obtain for the Participant, the Participant's spouse, or any dependent of the Participant (as defined in Section 152 of the Code) medical care described in Section 213(d) of the Code;

(b) costs directly related to the purchase (excluding mortgage payments) of a principal residence for the Participant;

(c) payment of tuition, related educational fees, and room and board expenses for the next 12 months of post-secondary education for the Participant, the Participant's spouse, or any dependent of the Participant; or

(d) the need to prevent the eviction of the Participant from his principal residence or foreclosure on the mortgage of the Participant's principal residence.

A withdrawal shall be deemed to be necessary to satisfy an immediate and heavy financial need of a Participant only if all of the following requirements are satisfied:

The withdrawal is not in excess of the amount of the immediate and heavy financial need of the Participant.

The Participant has obtained all distributions, other than hardship distributions, and all non-taxable loans currently available under all plans maintained by an Employer or any Related Company.

The Participant's Tax-Deferred Contributions and the Participant's elective tax-deferred contributions and employee after-tax contributions under all other tax-qualified plans maintained by an Employer or any Related Company shall be suspended for at least twelve months after his receipt of the withdrawal.

The Participant shall not make Tax-Deferred Contributions or elective tax-deferred contributions under any other tax-qualified plan maintained by an Employer or any Related Company for the Participant's taxable year immediately following the taxable year of the withdrawal in excess of the applicable limit under Section 402(g) of the Code for such next taxable year less the amount of the Participant's Tax-Deferred Contributions and elective tax-deferred contributions under any other plan maintained by an Employer or any Related Company for the taxable year of the withdrawal.

The minimum hardship withdrawal that a Participant may make is $1,000. The amount of hardship withdrawal may include any amounts necessary to pay any Federal, state, or local income taxes or penalties reasonably anticipated to result from the distribution. A Participant shall not fail to be treated as an Eligible Employee for purposes of applying the limitations contained in Article VII of the Plan merely because his Tax-Deferred Contributions are suspended in accordance with this Section.

13.7. Order of Withdrawal from a Participant's Sub-Accounts

Distribution of a withdrawal amount shall be made from a Participant's Sub-Accounts, to the extent necessary, in the order prescribed by the Administrator, which order shall be uniform with respect to all Participants and non-discriminatory. If the Sub-Account from which a Participant is receiving a withdrawal is invested in more than one Investment Fund, the withdrawal shall be charged against the Investment Funds as directed by the Administrator.

ARTICLE XIV
TERMINATION OF EMPLOYMENT AND SETTLEMENT DATE

14.1. Termination of Employment and Settlement Date

A Participant's Settlement Date shall occur on the date he terminates employment with an Employer and all Related Companies because of death, disability, retirement, or other termination of employment. Written notice of a Participant's Settlement Date shall be given by the Administrator to the Trustee.

ARTICLE XV
DISTRIBUTIONS

15.1. Distributions to Participants

A Participant whose Settlement Date occurs shall receive distribution of his vested interest in his Separate Account in the form provided under Article XVI beginning as soon as reasonably practicable following his Settlement Date or the date his application for distribution is filed with the Administrator, if later. In addition, a Participant who continues in employment with an Employer or a Related Company after his Normal Retirement Date may elect to receive distribution of all or any portion of his Separate Account in the form provided under Article XVI at any time following his Normal Retirement Date.

15.2. Distributions to Beneficiaries

If a Participant dies prior to the date distribution of his vested interest in his Separate Account begins under this Article, his Beneficiary shall receive distribution of the Participant's vested interest in his Separate Account in the form provided under Article XVI beginning as soon as reasonably practicable following the date the Beneficiary's application for distribution is filed with the Administrator. Unless distribution is to be made over the life or over a period certain not greater than the life expectancy of the Beneficiary, distribution of the Participant's entire vested interest shall be made to the Beneficiary no later than the end of the fifth calendar year beginning after the Participant's death. If distribution is to be made over the life or over a period certain no greater than the life expectancy of the Beneficiary, distribution shall commence no later than:

(a) If the Beneficiary is not the Participant's spouse, the end of the first calendar year beginning after the Participant's death; or

(b) If the Beneficiary is the Participant's spouse, the later of (i) the end of the first calendar year beginning after the Participant's death or (ii) the end of the calendar year in which the Participant would have attained age 70 1/2.

If distribution is to be made to a Participant's spouse, it shall be made available within a reasonable period of time after the Participant's death that is no less favorable than the period of time applicable to other distributions. If a Participant dies after the date distribution of his vested interest in his Separate Account begins under this Article, but before his entire vested interest in his Separate Account is distributed, his Beneficiary shall receive distribution of the remainder of the Participant's vested interest in his Separate Account beginning as soon as reasonably practicable following the Participant's date of death in a form that provides for distribution at least as rapidly as under the form in which the Participant was receiving distribution.

15.3. Cash Outs and Participant Consent

Notwithstanding any other provision of the Plan to the contrary, if a Participant's vested interest in his Separate Account does not exceed $3,500, distribution of such vested interest shall be

made to the Participant in a single sum payment as soon as reasonably practicable following his Settlement Date. If a Participant's vested interest in his Separate Account exceeds $3,500, distribution shall not commence to such Participant prior to his Normal Retirement Date without the Participant's written consent and the written consent of his spouse if payment is not made through the purchase of a qualified joint and survivor annuity. If at the time of a distribution or deemed distribution to a Participant from his Separate Account, the Participant's vested interest in his Separate Account exceeded $3,500, then for purposes of this Section, the Participant's vested interest in his Separate Account on any subsequent date shall be deemed to exceed $3,500.

15.4. Required Commencement of Distribution

Notwithstanding any other provision of the Plan to the contrary, distribution of a Participant's vested interest in his Separate Account shall commence to the Participant no later than the earlier of:

(a) 60 days after the close of the Plan Year in which (i) the Participant's Normal Retirement Date occurs, (ii) the 10th anniversary of the year in which he commenced participation in the Plan occurs, or (iii) his Settlement Date occurs, whichever is latest; or

(b) the April 1 following the close of the calendar year in which he attains age 70 1/2, whether or not his Settlement Date has occurred, except that if a Participant attained age 70 1/2 prior to January 1, 1988, and was not a five-percent owner (as defined in Section 416 of the Code) at any time during the five-Plan-Year period ending within the calendar year in which he attained age 70 1/2, distribution of such Participant's vested interest in his Separate Account shall commence no later than the April 1 following the close of the calendar year in which he attains age 70 1/2 or retires, whichever is later.

Distributions required to commence under this Section shall be made in the form provided under Article XVI and in accordance with Section 401(a)(9) of the Code and regulations issued thereunder, including the minimum distribution incidental benefit requirements.

15.5. Reemployment of a Participant

If a Participant whose Settlement Date has occurred is reemployed by an Employer or a Related Company, he shall lose his right to any distribution or further distributions from the Trust arising from his prior Settlement Date and his interest in the Trust shall thereafter be treated in the same manner as that of any other Participant whose Settlement Date has not occurred.

15.6. Restrictions on Alienation

Except as provided in Section 401(a)(13) of the Code relating to qualified domestic relations orders and Section 1,401(a)-13(b)(2) of Treasury regulations relating to Federal tax levies and judgments, no benefit under the Plan at any time shall be subject in any manner to anticipation, alienation, assignment (either at law or in equity), encumbrance, garnishment, levy, execution, or other legal or equitable process; and no person shall have power in any manner to anticipate,

transfer, assign (either at law or in equity), alienate or subject to attachment, garnishment, levy, execution, or other legal or equitable process, or in any way encumber his benefits under the Plan, or any part thereof, and any attempt to do so shall be void.

15.7. Facility of Payment

If the Administrator finds that any individual to whom an amount is payable hereunder is incapable of attending to his financial affairs because of any mental or physical condition, including the infirmities of advanced age, such amount (unless prior claim therefor shall have been made by a duly qualified guardian or other legal representative) may, in the discretion of the Administrator, be paid to another person for the use or benefit of the individual found incapable of attending to his financial affairs or in satisfaction of legal obligations incurred by or on behalf of such individual. The Trustee shall make such payment only upon receipt of written instructions to such effect from the Administrator. Any such payment shall be charged to the Separate Account from which any such payment would otherwise have been paid to the individual found incapable of attending to his financial affairs and shall be a complete discharge of any liability therefor under the Plan.

15.8. Inability to Locate Payee

If any benefit becomes payable to any person, or to the executor or administrator of any deceased person, and if that person or his executor or administrator does not present himself to the Administrator within a reasonable period after the Administrator mails written notice of his eligibility to receive a distribution hereunder to his last known address and makes such other diligent effort to locate the person as the Administrator determines, that benefit will be forfeited. However, if the payee later files a claim for that benefit, the benefit will be restored.

15.9. Distribution Pursuant to Qualified Domestic Relations Orders

Notwithstanding any other provision of the Plan to the contrary, if a qualified domestic relations order so provides, distribution may be made to an alternate payee pursuant to a qualified domestic relations order, as defined in Section 414(p) of the Code, regardless of whether the Participant's Settlement Date has occurred or whether the Participant is otherwise entitled to receive a distribution under the Plan.

ARTICLE XVI
FORM OF PAYMENT

16.1. Definitions

For purposes of this Article, the following terms have the following meanings:

(a) A Participant's "annuity starting date" means the first day of the first period for which an amount is paid as an annuity or any other form.

(b) The "automatic annuity form" means the form of annuity that will be purchased on a Participant's behalf unless the Participant elects another form of annuity.

(c) A "qualified election" means an election that is made during the qualified election period. A qualified election of a form of payment other than a qualified joint and survivor annuity or designating a Beneficiary other than the Participant's spouse to receive amounts otherwise payable as a qualified preretirement survivor annuity must include the written consent of the Participant's spouse, if any. A Participant's spouse will be deemed to have given written consent to the Participant's election if the Participant establishes to the satisfaction of a Plan representative that spousal consent cannot be obtained because the spouse cannot be located or because of other circumstances set forth in Section 401(a)(11) of the Code and regulations issued thereunder. The spouse's written consent must acknowledge the effect of the Participant's election and must be witnessed by a Plan representative or a notary public. In addition, the spouse's written consent must either (i) specify the form of payment selected instead of a joint and survivor annuity, if applicable, and that such form may not be changed (except to a qualified joint and survivor annuity) without written spousal consent and specify any non-spouse Beneficiary designed by the Participant, if applicable, and that such Beneficiary may not be changed without written spousal consent or (ii) acknowledge that the spouse has the right to limit consent as provided in clause (i), but permit the Participant to change the form of payment selected or the designated Beneficiary without the spouse's further consent. Any written consent given or deemed to have been given by a Participant's spouse hereunder shall be irrevocable and shall be effective only with respect to such spouse and not with respect to any subsequent spouse.

(d) The "qualified election period" with respect to the automatic annuity form means the 90 day period ending on a Participant's annuity starting date. The "qualified election period" with respect to a qualified preretirement survivor annuity means the period beginning on the first day of the Plan Year in which the Participant attains age 35 or, if he terminates employment prior to such date, the day he terminates employment with his Employer and all Related Companies. A Participant whose employment has not terminated may make a qualified election designating a Beneficiary other than his spouse prior to the Plan Year in which he attains age 35; provided, however, that such election shall cease to be effective as of the first day of the Plan Year in which the Participant attains age 35.

(e) A "qualified joint and survivor annuity" means an immediate annuity payable at earliest retirement age under the Plan, as defined in regulations issued under Section 401(a)(11) of the Code, for the life of a Participant with a survivor annuity payable for the life of the Participant's spouse that is equal to at least 50 percent of the amount of the annuity payable during the joint lives of the Participant and his spouse, provided that the survivor annuity shall not be payable to a Participant's spouse if such spouse is not the same spouse to whom the Participant was married on his annuity starting date.

(f) A "qualified preretirement survivor annuity" means an annuity payable to the surviving spouse of a Participant in accordance with the provisions of Section 16.6.

(g) A "single life annuity" means an annuity payable for the life of the Participant.

16.2. Normal Form of Payment

Unless a Participant, or his Beneficiary, if the Participant has died, elects an optional form of payment, distribution shall be made to the Participant, or his Beneficiary, as the case may be, through the purchase of a single premium, nontransferable annuity contract for such term and in such form as the Participant, or his Beneficiary, if the Participant has died, shall select, subject to the provisions of Section 16.5; provided, however, that a Participant's Beneficiary may not elect to receive distribution of an annuity payable over the joint lives of the Beneficiary and any other individual. The terms of any annuity contract purchased hereunder and distributed to a Participant or his Beneficiary shall comply with the requirements of the Plan.

16.3. Optional Forms of Payment

Subject to the provisions of Section 16.5, a Participant, or his Beneficiary, as the case may be, may elect to receive distribution in one of the following optional forms of payment:

(a) Single Sum Payment.

(b) Installment Payments - Distribution shall be made in a series of installments over a period not exceeding the life expectancy of the Participant, or the Participant's Beneficiary, if the Participant has died, or a period not exceeding the joint life and last survivor expectancy of the Participant and his Beneficiary. Each installment shall be equal in amount except as necessary to adjust for any changes in the value of the Participant's Separate Account. The determination of life expectancies shall be made on the basis of the expected return multiples in Tables V and VI of Section 1.72-9 of the Treasury regulations and shall be calculated either once at the time installment payments begin or annually for the Participant and/or his Beneficiary, if his Beneficiary is his spouse, as determined by the Participant at the time installment payments begin.

Distribution of the fair market value of the Participant's Separate Account under an optional form of payment shall be made in cash or in kind, as elected by the Participant.

16.4. Change of Election

Subject to the provisions of Section 16.5, a Participant or Beneficiary who has elected an optional form of payment or elected an annuity form of payment may revoke or change his election at any time prior to his annuity starting date by filing with the Administrator a written election in the form prescribed by the Administrator.

16.5. Form of Annuity Requirements

Distribution shall be made to a Participant through the purchase of an annuity contract that provides for payment in one of the following automatic annuity forms, unless the Participant elects a different type of annuity or elects an optional form of payment.

(a) The automatic annuity form for a Participant who is married on his annuity starting date is the 50 percent qualified joint and survivor annuity.

(b) The automatic annuity form for a Participant who is not married on his annuity starting date is the single life annuity.

A Participant's election of an annuity other than the automatic annuity form or of the optional form of payment shall not be effective unless it is a qualified election; provided, however, that spousal consent shall not be required if the form of payment elected by the Participant is a qualified joint and survivor annuity. A Participant who has elected an optional form of payment can change his election only pursuant to a qualified election.

16.6. Qualified Preretirement Survivor Annuity Requirements

If a married Participant dies before his annuity starting date, his spouse shall receive distribution of the value of the Participant's vested interest in his Separate Account through the purchase of an annuity contract that provides for payment over the life of the Participant's spouse. A Participant's spouse may elect to receive distribution under any one of the other forms of payment available under this Article instead of in the qualified preretirement survivor annuity form. A Participant can only designate a non-spouse Beneficiary to receive distribution of that portion of his Separate Account otherwise payable as a qualified preretirement survivor annuity pursuant to a qualified election.

16.7. Direct Rollover

Notwithstanding any other provision of the Plan to the contrary, in lieu of receiving distribution in the form of payment provided under this Article, a "qualified distributee" may elect in writing, in accordance with rules prescribed by the Administrator, to have any portion or all of a distribution made on or after January 1, 1993, that is an "eligible rollover distribution" paid directly by the Plan to the "eligible retirement plan" designated by the "qualified distributee"; provided, however, that this provision shall not apply if the total distribution is less than $200 and that a "qualified distributee" may not elect this provision with respect to a portion of a distribution that is less than $500. Any such payment by the Plan to another "eligible retirement

plan" shall be a direct rollover and shall be made only after all applicable consent requirements are satisfied. For purposes of this Section, the following terms have the following meanings:

(a) An "eligible retirement plan" means an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, or a qualified trust described in Section 401(a) of the Code that accepts rollovers; provided, however, that, in the case of a direct rollover by a surviving spouse, an eligible retirement plan does not include a qualified trust described in Section 401(a) of the Code.

(b) An "eligible rollover distribution" means any distribution of all or any portion of the balance of a Participant's Separate Account; provided, however, that an eligible rollover distribution does not include: any distribution that is one of a series of substantially equal periodic payments made not less frequently than annually for the life or life expectancy of the qualified distributee or the joint lives or joint life expectancies of the qualified distributee and the qualified distributee's designated beneficiary, or for a specified period of ten years or more; and any distribution to the extent such distribution is required under Section 401(a)(9) of the Code.

(c) A "qualified distributee" means a Participant, his surviving spouse, or his spouse or former spouse who is an alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code.

16.8. Notice Regarding Forms of Payment

The Administrator shall provide each Participant with a written explanation of his right to defer distribution until his Normal Retirement Date, or such later date as may be provided in the Plan, his right to make a direct rollover, and (i) the terms and conditions of the automatic annuity form and the other forms of payment available under the Plan, (ii) the Participant's right to choose a form of payment other than the automatic annuity form or to revoke such choice, and (iii) the rights of the Participant's spouse. The Administrator shall provide such explanation within the 60 day period ending 30 days before the Participant's annuity starting date. Notwithstanding the foregoing, distribution of the Participant's Separate Account may commence less than 30 days after such explanation is provided to the Participant if (i) the Administrator clearly informs the Participant of his right to consider his election of whether or not to make a direct rollover or to receive a distribution prior to his Normal Retirement Date and his election of a form of payment for a period of at least 30 days following his receipt of the explanation, (ii) the Participant, after receiving the explanation, affirmatively elects an early distribution with his spouse's written consent, if necessary, (iii) the Participant's annuity starting date is a date after the date the explanation is provided to him, (iv) the Participant may revoke his election at any time prior to the later of his annuity starting date or the expiration of the seven-day period beginning the day after the date the explanation is provided to him, and (v) distribution does not commence to the Participant before such revocation period ends.

In addition, the Administrator shall provide such a Participant with a written explanation of (i) the terms and conditions of the qualified preretirement survivor annuity, (ii) the Participant's

right to designate a non-spouse Beneficiary to receive distribution of that portion of his Separate Account otherwise payable as a qualified preretirement survivor annuity or to revoke such designation, and (iii) the rights of the Participant's spouse. The Administrator shall provide such explanation within one of the following periods, whichever ends last:

(a) the period beginning with the first day of the Plan Year in which the Participant attains age 32 and ending on the last day of the Plan Year preceding the Plan Year in which the Participant attains age 35; or

(b) the period beginning 12 calendar months before the date an individual becomes a Participant and ending 12 calendar months after such date;

provided, however, that in the case of a Participant who separates from service prior to attaining age 35, the explanation shall be provided to such Participant within the period beginning 12 calendar months before the Participant's separation from service and ending 12 calendar months after his separation from service.

16.9. Reemployment

If a Participant is reemployed by an Employer or a Related Company prior to receiving distribution of the entire balance of his vested interest in his Separate Account, his prior election of a form of payment hereunder shall become ineffective.

16.10. Distribution in the Form of Employer Stock

Notwithstanding any other provision of the Plan to the contrary, a Participant may elect to receive distribution of the fair market value of his Separate Account in the form of Employer stock.

ARTICLE XVII
BENEFICIARIES

17.1. Designation of Beneficiary

A married Participant's Beneficiary shall be his spouse. A married Participant may designate a non-spouse Beneficiary, but only pursuant to a qualified election as provided in Article XVI.

A Participant may designate a Beneficiary on the form prescribed by the Administrator. If no Beneficiary has been designated pursuant to the provisions of this Section, or if no Beneficiary survives the Participant and he has no surviving spouse, then the Beneficiary under the Plan shall be the Participant's estate. If a Beneficiary dies after becoming entitled to receive a distribution under the Plan but before distribution is made to him in full, and if no other Beneficiary has been designated to receive the balance of the distribution in that event, the estate of the deceased Beneficiary shall be the Beneficiary as to the balance of the distribution.

ARTICLE XVIII
ADMINISTRATION

18.1. Authority of the Sponsor

The Sponsor, which shall be the administrator for purposes of ERISA and the plan administrator for purposes of the Code, shall be responsible for the administration of the Plan and, in addition to the powers and authorities expressly conferred upon it in the Plan, shall have all such powers and authorities as may be necessary to carry out the provisions of the Plan, including the power and authority to interpret and construe the provisions of the Plan, to make benefit determinations, and to resolve any disputes which arise under the Plan. The Sponsor may employ such attorneys, agents, and accountants as it may deem necessary or advisable to assist in carrying out its duties hereunder. The Sponsor shall be a "named fiduciary" as that term is defined in Section 402(a)(2) of ERISA. The Sponsor may:

(a) allocate any of the powers, authority, or responsibilities for the operation and administration of the Plan (other than trustee responsibilities as defined in Section 405(c)(3) of ERISA) among named fiduciaries; and

(b) designate a person or persons other than a named fiduciary to carry out any of such powers, authority, or responsibilities;

except that no allocation by the Sponsor of, or designation by the Sponsor with respect to, any of such powers, authority, or responsibilities to another named fiduciary or a person other than a named fiduciary shall become effective unless such allocation or designation shall first be accepted by such named fiduciary or other person in a writing signed by it and delivered to the Sponsor.

18.2. Action of the Sponsor

Any act authorized, permitted, or required to be taken under the Plan by the Sponsor and which has not been delegated in accordance with Section 18.1, may be taken by a majority of the members of the board of directors of the Sponsor, either by vote at a meeting, or in writing without a meeting, or by the employee or employees of the Sponsor designated by the board of directors to carry out such acts on behalf of the Sponsor. All notices, advice, directions, certifications, approvals, and instructions required or authorized to be given by the Sponsor as under the Plan shall be in writing and signed by either (i) a majority of the members of the board of directors of the Sponsor or by such member or members as may be designated by an instrument in writing, signed by all the members thereof, as having authority to execute such documents on its behalf, or (ii) the employee or employees authorized to act for the Sponsor in accordance with the provisions of this Section.

18.3. Claims Review Procedure

Whenever a claim for benefits under the Plan filed by any person (herein referred to as the "Claimant") is denied, whether in whole or in part, the Sponsor shall transmit a written notice of

such decision to the Claimant within 90 days of the date the claim was filed or, if special circumstances require an extension, within 180 days of such date, which notice shall be written in a manner calculated to be understood by the Claimant and shall contain a statement of (i) the specific reasons for the denial of the claim, (ii) specific reference to pertinent Plan provisions on which the denial is based, and (iii) a description of any additional material or information necessary for the Claimant to perfect the claim and an explanation of why such information is necessary. The notice shall also include a statement advising the Claimant that, within 60 days of the date on which he receives such notice, he may obtain review of such decision in accordance with the procedures hereinafter set forth. Within such 60-day period, the Claimant or his authorized representative may request that the claim denial be reviewed by filing with the Sponsor a written request therefor, which request shall contain the following information:

(a) the date on which the Claimant's request was filed with the Sponsor; provided, however, that the date on which the Claimant's request for review was in fact filed with the Sponsor shall control in the event that the date of the actual filing is later than the date stated by the Claimant pursuant to this paragraph;

(b) the specific portions of the denial of his claim which the Claimant requests the Sponsor to review;

(c) a statement by the Claimant setting forth the basis upon which he believes the Sponsor should reverse the previous denial of his claim for benefits and accept his claim as made; and

(d) any written material (offered as exhibits) which the Claimant desires the Sponsor to examine in its consideration of his position as stated pursuant to paragraph (c) of this Section.

Within 60 days of the date determined pursuant to paragraph (a of this Section or, if special circumstances require an extension, within 120 days of such date, the Sponsor shall conduct a full and fair review of the decision denying the Claimant's claim for benefits and shall render its written decision on review to the Claimant. The Sponsor's decision on review shall be written in a manner calculated to be understood by the Claimant and shall specify the reasons and Plan provisions upon which the Sponsor's decision was based.

18.4. Qualified Domestic Relations Orders

The Sponsor shall establish reasonable procedures to determine the status of domestic relations orders and to administer distributions under domestic relations orders which are deemed to be qualified orders. Such procedures shall be in writing and shall comply with the provisions of Section 414(p) of the Code and regulations issued thereunder.

18.5. Indemnification

In addition to whatever rights of indemnification the members of the board of directors of the Sponsor or any employee or employees of the Sponsor to whom any power, authority, or

responsibility is delegated pursuant to Section 18.2, may be entitled under the articles of incorporation or regulations of the Sponsor, under any provision of law, or under any other agreement, the Sponsor shall satisfy any liability actually and reasonably incurred by any such person or persons, including expenses, attorneys' fees, judgments, fines, and amounts paid in settlement (other than amounts paid in settlement not approved by the Sponsor), in connection with any threatened, pending or completed action, suit, or proceeding which is related to the exercising or failure to exercise by such person or persons of any of the powers, authority, responsibilities, or discretion as provided under the Plan, or reasonably believed by such person or persons to be provided hereunder, and any action taken by such person or persons in connection therewith, unless the same is judicially determined to be the result of such person or persons' gross negligence or willful misconduct.

18.6. Actions Binding

Subject to the provisions of Section 18.3, any action taken by the Sponsor which is authorized, permitted, or required under the Plan shall be final and binding upon the Employers, the Trustee, all persons who have or who claim an interest under the Plan, and all third parties dealing with the Employers or the Trustee.

ARTICLE XIX
AMENDMENT AND TERMINATION

19.1. Amendment

Subject to the provisions of Section 19.2, the Sponsor may at any time and from time to time, by action of its board of directors, or such officers of the Sponsor as are authorized by its board of directors, amend the Plan, either prospectively or retroactively. Any such amendment shall be by written instrument executed by the Sponsor.

19.2. Limitation on Amendment

The Sponsor shall make no amendment to the Plan which shall decrease the accrued benefit of any Participant or Beneficiary, except that nothing contained herein shall restrict the right to amend the provisions of the Plan relating to the administration of the Plan and Trust. Moreover, no such amendment shall be made hereunder which shall permit any part of the Trust to revert to an Employer or any Related Company or be used or be diverted to purposes other than the exclusive benefit of Participants and Beneficiaries.

19.3. Termination

The Sponsor reserves the right, by action of its board of directors, to terminate the Plan as to all Employers at any time (the effective date of such termination being hereinafter referred to as the "termination date"). Upon any such termination of the Plan, the following actions shall be taken for the benefit of Participants and Beneficiaries:

(a) As of the termination date, each Investment Fund shall be valued and all Separate Accounts and Sub-Accounts shall be adjusted in the manner provided in Article XI, with any unallocated contributions or forfeitures being allocated as of the termination date in the manner otherwise provided in the Plan. The termination date shall become a Valuation Date for purposes of Article XI. In determining the net worth of the Trust, there shall be included as a liability such amounts as shall be necessary to pay all expenses in connection with the termination of the Trust and the liquidation and distribution of the property of the Trust, as well as other expenses, whether or not accrued, and shall include as an asset all accrued income.

(b) All Separate Accounts shall then be disposed of to or for the benefit of each Participant or Beneficiary in accordance with the provisions of Article XV as if the termination date were his Settlement Date; provided, however, that notwithstanding the provisions of Article XV, if the Plan does not offer an annuity option and if neither his Employer nor a Related Company establishes or maintains another defined contribution plan (other than an employee stock ownership plan as defined in Section 4975(e)(7) of the Code), the Participant's written consent to the commencement of distribution shall not be required regardless of the value of the vested portions of his Separate Account.

(c) Notwithstanding the provisions of paragraph (b) of this Section, no distribution shall be made to a Participant of any portion of the balance of his Tax-Deferred Contributions Sub-Account prior to his separation from service (other than a distribution made in accordance with Article XIII or required in accordance with Section 401(a)(9) of the Code) unless (i) neither his Employer nor a Related Company establishes or maintains another defined contribution plan other than an employee stock ownership plan as defined in Section 4975(e)(7) of the Code, a tax credit employee stock ownership plan as defined in Section 409 of the Code, or a simplified employee pension as defined in Section 408(k) of the Code) either at the time the Plan is terminated or at any time during the period ending 12 months after distribution of all assets from the Plan; provided, however, that this provision shall not apply if fewer than two percent of the Eligible Employees under the Plan were eligible to participate at any time in such other defined contribution plan during the 24-month period beginning 12 months before the Plan termination, and (ii) the distribution the Participant receives is a "lump sum distribution" as defined in Section 402(e)(4) of the Code, without regard to clauses (i), (ii), (iii), and (iv) of sub-paragraph (A), sub-paragraph (B), or sub-paragraph (H) thereof.

Notwithstanding anything to the contrary contained in the Plan, upon any such Plan termination, the vested interest of each Participant and Beneficiary in his Employer Contributions Sub-Account shall be 100 percent; and, if there is a partial termination of the Plan, the vested interest of each Participant and Beneficiary who is affected by the partial termination in his Employer Contributions Sub-Account shall be 100 percent. For purposes of the preceding sentence only, the Plan shall be deemed to terminate automatically if there shall be a complete discontinuance of contributions hereunder by all Employers.

19.4. Reorganization

The merger, consolidation, or liquidation of any Employer with or into any other Employer or a Related Company shall not constitute a termination of the Plan as to such Employer. If an Employer disposes of substantially all of the assets used by the Employer in a trade or business or disposes of a subsidiary and in connection therewith one or more Participants terminates employment but continues in employment with the purchaser of the assets or with such subsidiary, no distribution from the Plan shall be made to any such Participant prior to his separation from service (other than a distribution made in accordance with Article XIII or required in accordance with Section 401(a)(9) of the Code), except that a distribution shall be permitted to be made in such a case, subject to the Participant's consent (to the extent required by law), if (i) the distribution would constitute a "lump sum distribution" as defined in section 402(e)(4) of the Code, without regard to clauses (i), (ii), (iii), or (iv) of sub-paragraph (A), sub-paragraph (B), or sub-paragraph (H) thereof, (ii) the Employer continues to maintain the Plan after the disposition, (iii) the purchaser does not maintain the Plan after the disposition, and (iv) the distribution is made by the end of the second calendar year after the calendar year in which the disposition occurred.

19.5. Withdrawal of an Employer

An Employer other than the Sponsor may withdraw from the Plan at any time upon notice in writing to the Administrator (the effective date of such withdrawal being hereinafter referred to as the "withdrawal date"), and shall thereupon cease to be an Employer for all purposes of the Plan. An Employer shall be deemed automatically to withdraw from the Plan in the event of its complete discontinuance of contributions, or, subject to Section 19.4 and unless the Sponsor otherwise directs, it ceases to be a Related Company of the Sponsor or any other Employer. Upon the withdrawal of an Employer, the withdrawing Employer shall determine whether a partial termination has occurred with respect to its Employees. In the event that the withdrawing Employer determines a partial termination has occurred, the action specified in Section 19.3 shall be taken as of the withdrawal date, as on a termination of the Plan, but with respect only to Participants who are employed solely by the withdrawing Employer, and who, upon such withdrawal, are neither transferred to nor continued in employment with any other Employer or a Related Company. The interest of any Participant employed by the withdrawing Employer who is transferred to or continues in employment with any other Employer or a Related Company, and the interest of any Participant employed solely by an Employer or a Related Company other than the withdrawing Employer, shall remain unaffected by such withdrawal; no adjustment to his Separate Accounts shall be made by reason of the withdrawal; and he shall continue as a Participant hereunder subject to the remaining provisions of the Plan.

ARTICLE XX
ADOPTION BY OTHER ENTITIES

20.1. Adoption by Related Companies

A Related Company that is not an Employer may, with the consent of the Sponsor, adopt the Plan and become an Employer hereunder by causing an appropriate written instrument evidencing such adoption to be executed in accordance with the requirements of its organizational authority. Any such instrument shall specify the effective date of the adoption.

20.2. Effective Plan Provisions

An Employer who adopts the Plan shall be bound by the provisions of the Plan in effect at the time of the adoption and as subsequently in effect because of any amendment to the Plan.

ARTICLE XXI
MISCELLANEOUS PROVISIONS

21.1. No Commitment as to Employment

Nothing contained herein shall be construed as a commitment or agreement upon the part of any person to continue his employment with an Employer or Related Company, or as a commitment on the part of any Employer or Related Company to continue the employment, compensation, or benefits of any person for any period.

21.2. Benefits

Nothing in the Plan nor the Trust Agreement shall be construed to confer any right or claim upon any person, firm, or corporation other than the Employers, the Trustee, Participants, and Beneficiaries.

21.3. No Guarantees

The Employers, the Administrator, and the Trustee do not guarantee the Trust from loss or depreciation, nor do they guarantee the payment of any amount which may become due to any person hereunder.

21.4. Expenses

The expenses of administration of the Plan, including the expenses of the Administrator and fees of the Trustee, shall be paid from the Trust as a general charge thereon, unless the Sponsor elects to make payment. Notwithstanding the foregoing, the Sponsor may direct that administrative expenses that are allocable to the Separate Account of a specific Participant shall be paid from that Separate Account and the costs incident to the management of the assets of an Investment Fund or to the purchase or sale of securities held in an Investment Fund shall be paid by the Trustee from such Investment Fund.

21.5. Precedent

Except as otherwise specifically provided, no action taken in accordance with the Plan shall be construed or relied upon as a precedent for similar action under similar circumstances.

21.6. Duty to Furnish Information

The Employers, the Administrator, and the Trustee shall furnish to any of the others any documents, reports, returns, statements, or other information that the other reasonably deems necessary to perform its duties hereunder or otherwise imposed by law.

21.7. Withholding

The Trustee shall withhold any tax which by any present or future law is required to be withheld, and which the Administrator notifies the Trustee in writing is to be so withheld, from any payment to any Participant or Beneficiary hereunder.

21.8. Merger, Consolidation, or Transfer of Plan Assets

The Plan shall not be merged or consolidated with any other plan, nor shall any of its assets or liabilities be transferred to another plan, unless, immediately after such merger, consolidation, or transfer of assets or liabilities, each Participant in the Plan would receive a benefit under the Plan which is at least equal to the benefit he would have received immediately prior to such merger, consolidation, or transfer of assets or liabilities (assuming in each instance that the Plan had then terminated).

21.9. Back Pay Awards

The provisions of this Section shall apply only to an Employee or former Employee who becomes entitled to back pay by an award or agreement of an Employer without regard to mitigation of damages. If a person to whom this Section applies was or would have become an Eligible Employee after such back pay award or agreement has been effected, and if any such person who had not previously elected to make Tax-Deferred Contributions pursuant to Section 4.1 shall within 30 days of the date he receives notice of the provisions of this Section make an election to make Tax-Deferred Contributions in accordance with such Section 4.1 (retroactive to any Enrollment Date as of which he was or has become eligible to do so), then such Participant may elect that any Tax-Deferred Contributions not previously made on his behalf but which, after application of the foregoing provisions of this Section, would have been made under the provisions of Article IV, shall be made out of the proceeds of such back pay award or agreement. In addition, if any such Employee or former Employee would have been eligible to participate in the allocation of Employer Contributions under the provisions of Article VI for any prior Plan Year after such back pay award or agreement has been effected, his Employer shall make an Employer Contribution equal to the amount of the Employer Contribution which would have been allocated to such Participant under the provisions of Article VI as in effect during each such Plan Year. The amounts of such additional contributions shall be credited to the Separate Account of such Participant. Any additional contributions made by such Participant and by an Employer pursuant to this Section shall be made in accordance with, and subject to the limitations of the applicable provisions of Articles IV, VI, and VII.

21.10. Condition on Employer Contributions

Notwithstanding anything to the contrary contained in the Plan or the Trust Agreement, any contribution of an Employer hereunder is conditioned upon the continued qualification of the Plan under Section 401(a) of the Code, the exempt status of the Trust under Section 501(a) of the Code, and the deductibility of the contribution under Section 404 of the Code. Except as otherwise provided in this Section and Section 21.11, however, in no event shall any portion of

the property of the Trust ever revert to or otherwise inure to the benefit of an Employer or any Related Company.

21.11. Return of Contributions to an Employer

Notwithstanding any other provision of the Plan or the Trust Agreement to the contrary, in the event any contribution of an Employer made hereunder:

(a) is made under a mistake of fact, or

(b) is disallowed as a deduction under Section 404 of the Code,

such contribution may be returned to the Employer within one year after the payment of the contribution or the disallowance of the deduction to the extent disallowed, whichever is applicable. In the event the Plan does not initially qualify under Section 401(a) of the Code, any contribution of an Employer made hereunder may be returned to the Employer within one year of the date of denial of the initial qualification of the Plan, but only if an application for determination was made within the period of time prescribed under Section 403(c)(2)(B) of ERISA.

21.12. Validity of Plan

The validity of the Plan shall be determined and the Plan shall be construed and interpreted in accordance with the laws of the State of Commonwealth in which the Sponsor has its principal place of business, except as preempted by applicable Federal law. The invalidity or illegality of any provision of the Plan shall not affect the legality or validity of any other part thereof.

21.13. Trust Agreement

The Trust Agreement and the Trust maintained thereunder shall be deemed to be a part of the Plan as if fully set forth herein and the provisions of the Trust Agreement are hereby incorporated by reference into the Plan.

21.14. Parties Bound

The Plan shall be binding upon the Employers, all Participants and Beneficiaries hereunder, and, as the case may be, the heirs, executors, administrators, successors, and assigns of each of them.

21.15. Application of Certain Plan Provisions

A Participant's Beneficiary, if the Participant has died, or alternate payee under a qualified domestic relations order shall be treated as a Participant for purposes of directing investments as provided in Article X. For purposes of the general administrative provisions and limitations of the Plan, a Participant's Beneficiary or alternate payee under a qualified domestic relations order shall be treated as any other person entitled to receive benefits under the Plan. Upon any termination of the Plan, any such Beneficiary or alternate payee under a qualified domestic

relations order who has an interest under the Plan at the time of such termination, which does not cease by reason thereof, shall be deemed to be a Participant for all purposes of the Plan.

21.16. Leased Employees

Any leased employee, other than an excludable leased employee, shall be treated as an employee of the Employer for which he performs services for all purposes of the Plan; provided, however, that contributions to a qualified plan made on behalf of a leased employee by the leasing organization that are attributable to services for the Employer shall be treated as having been made by the Employer and there shall be no duplication of benefits under this Plan. A "leased employee" means any person who performs services for an Employer or a Related Company (the "recipient") (other than an employee of the recipient) pursuant to an agreement between the recipient and any other person (the "leasing organization") on a substantially full-time basis for a period of at least one year, provided that such services are of a type historically performed, in the business field of the recipient, by employees. An "excludable leased employee" means any leased employee of the recipient who is covered by a money purchase pension plan maintained by the leasing organization which provides for (i) a nonintegrated employer contribution on behalf of each participant in the plan equal to at least ten percent of compensation, (ii) full and immediate vesting, and (iii) immediate participation by employees of the leasing organization (other than employees who perform substantially all of their services for the leasing organization or whose compensation from the leasing organization in each plan year during the four-year period ending with the plan year is less than $1,000); provided, however, that leased employees do not constitute more than 20 percent of the recipient's nonhighly compensated work force. For purposes of this Section, contributions or benefits provided to a leased employee by the leasing organization that are attributable to services performed for the recipient shall be treated as provided by the recipient.

21.17. Transferred Funds

If funds from another qualified plan are transferred or merged into the Plan, such funds shall be held and administered in accordance with any restrictions applicable to them under such other plan to the extent required by law and shall be accounted for separately to the extent necessary to accomplish the foregoing.

ARTICLE XXII
TOP-HEAVY PROVISIONS

22.1. Definitions

For purposes of this Article, the following terms shall have the following meanings:

(a) The "compensation" of an employee means compensation as defined in Section 415 of the Code and regulations issued thereunder. In no event, however, shall the compensation of a Participant taken into account under the Plan for any Plan Year exceed (1) $200,000 for Plan Years beginning prior to January 1, 1994, or (2) $150,000 for Plan Years beginning on or after January 1, 1994 (subject to adjustment annually as provided in Section 401(a)(17)(B) and Section 415(d) of the Code; provided, however, that the dollar increase in effect on January 1 of any calendar year, if any, is effective for Plan Years beginning in such calendar year). If the compensation of a Participant is determined over a period of time that contains fewer than 12 calendar months, then the annual compensation limitation described above shall be adjusted with respect to that Participant by multiplying the annual compensation limitation in effect for the Plan Year by a fraction the numerator of which is the number of full months in the period and the denominator of which is 12; provided, however, that no proration is required for a Participant who is covered under the Plan for less than one full Plan Year if the formula for allocations is based on Compensation for a period of at least 12 months. In determining the compensation, for purposes of applying the annual compensation limitation described above, of a Participant who is a five-percent owner or one of the ten Highly Compensated Employees receiving the greatest compensation for the Plan Year, the compensation of the Participant's spouse and of his lineal descendants who have not attained age 19 as of the close of the Plan Year shall be included as compensation of the Participant for the Plan Year. If as a result of applying the family aggregation rule described in the preceding sentence the annual compensation limitation would be exceeded, the limitation shall be prorated among the affected family members in proportion to each member's compensation as determined prior to application of the family aggregation rules.

(b) The "determination date" with respect to any Plan Year means the last day of the preceding Plan Year, except that the determination date with respect to the first Plan Year of the Plan, shall mean the last day of such Plan Year.

(c) A "key employee" means any Employee or former Employee who is a key employee pursuant to the provisions of Section 416(i)(1) of the Code and any Beneficiary of such Employee or former Employee.

(d) A "non-key employee" means any Employee who is not a key employee.

(e) A "permissive aggregation group" means those plans included in each Employer's required aggregation group together with any other plan or plans of the Employer, so long

as the entire group of plans would continue to meet the requirements of Sections 401(a)(4) and 410 of the Code.

(f) A "required aggregation group" means the group of tax-qualified plans maintained by an Employer or a Related Company consisting of each plan in which a key employee participates and each other plan that enables a plan in which a key employee participates to meet the requirements of Section 401(a)(4) or Section 410 of the Code, including any plan that terminated within the five-year period ending on the relevant determination date.

(g) A "super top-heavy group" with respect to a particular Plan Year means a required or permissive aggregation group that, as of the determination date, would qualify as a top-heavy group under the definition in paragraph (i) of this Section with "90 percent" substituted for "60 percent" each place where "60 percent" appears in the definition.

(h) A "super top-heavy plan" with respect to a particular Plan Year means a plan that, as of the determination date, would qualify as a top-heavy plan under the definition in paragraph (j) of this Section with "90 percent" substituted for "60 percent" each place where "60 percent" appears in the definition. A plan is also a "super top-heavy plan" if it is part of a super top-heavy group.

(i) A "top-heavy group" with respect to a particular Plan Year means a required or permissive aggregation group if the sum, as of the determination date, of the present value of the cumulative accrued benefits for key employees under all defined benefit plans included in such group and the aggregate of the account balances of key employees under all defined contribution plans included in such group exceeds 60 percent of a similar sum determined for all employees covered by the plans included in such group.

(j) A "top-heavy plan" with respect to a particular Plan Year means (i), in the case of a defined contribution plan (including any simplified employee pension plan), a plan for which, as of the determination date, the aggregate of the accounts (within the meaning of Section 416(g) of the Code and the regulations and rulings thereunder) of key employees exceeds 60 percent of the aggregate of the accounts of all participants under the plan, with the accounts valued as of the relevant valuation date and increased for any distribution of an account balance made in the five-year period ending on the determination date, (ii), in the case of a defined benefit plan, a plan for which, as of the determination date, the present value of the cumulative accrued benefits payable under the plan (within the meaning of Section 416(g) of the Code and the regulations and rulings thereunder) to key employees exceeds 60 percent of the present value of the cumulative accrued benefits under the plan for all employees, with the present value of accrued benefits to be determined under the accrual method uniformly used under all plans maintained by an Employer or, if no such method exists, under the slowest accrual method permitted under the fractional accrual rate of Section 411(b)(1)(C) of the Code and including the present value of any part of any accrued benefits distributed in the five-year period ending on the determination date, and (iii) any plan (including any simplified

employee pension plan) included in a required aggregation group that is a top-heavy group. For purposes of this paragraph, the accounts and accrued benefits of any employee who has not performed services for an Employer or a Related Company during the five-year period ending on the determination date shall be disregarded. For purposes of this paragraph, the present value of cumulative accrued benefits under a defined benefit plan for purposes of top-heavy determinations shall be calculated using the actuarial assumptions otherwise employed under such plan, except that the same actuarial assumptions shall be used for all plans within a required or permissive aggregation group. A Participant's interest in the Plan attributable to any Rollover Contributions, except Rollover Contributions made from a plan maintained by an Employer or a Related Company, shall not be considered in determining whether the Plan is top-heavy. Notwithstanding the foregoing, if a plan is included in a required or permissive aggregation group that is not a top-heavy group, such plan shall not be a top-heavy plan.

(k) The "valuation date" with respect to any determination date means the most recent Valuation Date occurring within the 12-month period ending on the determination date.

22.2. Applicability

Notwithstanding any other provision of the Plan to the contrary, the provisions of this Article shall be applicable during any Plan Year in which the Plan is determined to be a top-heavy plan as hereinafter defined.

22.3. Minimum Employer Contribution

If the Plan is determined to be a top-heavy plan, the Employer Contributions allocated to the Separate Account of each non-key employee who is an Eligible Employee and who is employed by an Employer or a Related Company on the last day of such top-heavy Plan Year shall be no less than the lesser of (i) three percent of his compensation or (ii) the largest percentage of compensation that is allocated as an Employer Contribution and/or Tax-Deferred Contribution for such Plan Year to the Separate Account of any key employee; except that, in the event the Plan is part of a required aggregation group, and the Plan enables a defined benefit plan included in such group to meet the requirements of Section 401(a)(4) or 410 of the Code, the minimum allocation of Employer Contributions to each such non-key employee shall be three percent of the compensation of such non-key employee. Any minimum allocation to a non-key employee required by this Section shall be made without regard to any social security contribution made on behalf of the non-key employee, his number of hours of service, his level of compensation, or whether he declined to make elective or mandatory contributions. Notwithstanding the minimum top-heavy allocation requirements of this Section, if the Plan is a top-heavy plan, each non-key employee who is an Eligible Employee and who is employed by an Employer or a Related Company on the last day of a top-heavy Plan Year and who is also covered under a top-heavy defined benefit plan maintained by an Employer or a Related Company will receive the top-heavy benefits provided under the defined benefit plan in lieu of the minimum top-heavy allocation under the Plan offset by the benefits provided under the Plan.

22.4. Adjustments to Section 415 Limitations

If the Plan is determined to be a top-heavy plan and an Employer maintains a defined benefit plan covering some or all of the Employees that are covered by the Plan, the defined benefit plan fraction and the defined contribution plan fraction, described in Article VII, shall be determined as provided in Section 415 of the Code by substituting "1.0" for "1.25" each place where "1.25" appears, except that such substitutions shall not be applied to the Plan if (i) the Plan is not a super top-heavy plan, (ii) the Employer Contribution for such top-heavy Plan Year for each non-key employee who is to receive a minimum top-heavy benefit hereunder is not less than four percent of such non-key employee's compensation, and (iii) the minimum annual retirement benefit accrued by a non-key employee who participates under one or more defined benefit plans of an Employer or a Related Company for such top-heavy Plan Year is not less than the lesser of three percent times years of service with an Employer or a Related Company or thirty percent.

ARTICLE XXIII
EFFECTIVE DATE

23.1. Effective Date of Amendment and Restatement

This amendment and restatement is effective as of July 1, 1996.

EXECUTED AT _____, this _____ day of _____, 1997.

ALPHA INDUSTRIES, INC.

By: _____
Title:

EXHIBIT (10)(o)

August 23, 1996

Paul Vincent
10 Leary Drive
Tewksbury MA 01876

Re: Change in Control Agreement

Dear Paul:

This letter is to confirm the agreement that we reached with regard to your employment with Alpha Industries, Inc. ("Alpha"). If: (i) a Change in Control occurs within two years of the date of this letter, and (ii) your employment with Alpha or a subsidiary of Alpha is involuntarily terminated within one year thereafter, then Alpha will pay you up to one year of salary continuation in accordance with the terms and conditions of this letter.

A "Change in Control" shall be deemed to have occurred if the Continuing Directors shall have ceased for any reason to constitute a majority of the Board of Directors of Alpha. For this purpose, a "Continuing Director" shall include any member of the Board of Directors of Alpha as of the date of this letter and any person nominated for election to the Board of Directors of Alpha by a majority of the then Continuing Directors.

Salary continuation payments under this letter will be reduced by the amount of any compensation that you receive from any person for services rendered during the salary continuation period. For any period in which you either: (i) engage in activities or enterprises (on behalf of yourself or others) that are directly competitive with any business activity of Alpha Industries, Inc. or any of its subsidiaries, or (ii) fail to actively seek gainful employment, you will not receive any salary continuation payments.

Please sign both copies of this letter and return it to Jim Nemiah. If you have any questions, please feel free to call Jim or George LeVan.

Sincerely,

David J. Aldrich
Vice President

AGREED TO:

Date:

EXHIBIT (10)(p)

August 23, 1996

James Nemiah
295 Concord Road
Bedford MA 01730

Re: Change in Control Agreement

Dear Jim:

This letter is to confirm the agreement that we reached with regard to your employment with Alpha Industries, Inc. ("Alpha"). If: (i) a Change in Control occurs within two years of the date of this letter, and (ii) your employment with Alpha or a subsidiary of Alpha is involuntarily terminated within one year thereafter, then Alpha will pay you up to one year of salary continuation in accordance with the terms and conditions of this letter.

A "Change in Control" shall be deemed to have occurred if the Continuing Directors shall have ceased for any reason to constitute a majority of the Board of Directors of Alpha. For this purpose, a "Continuing Director" shall include any member of the Board of Directors of Alpha as of the date of this letter and any person nominated for election to the Board of Directors of Alpha by a majority of the then Continuing Directors.

Salary continuation payments under this letter will be reduced by the amount of any compensation that you receive from any person for services rendered during the salary continuation period. For any period in which you either: (i) engage in activities or enterprises (on behalf of yourself or others) that are directly competitive with any business activity of Alpha Industries, Inc. or any of its subsidiaries, or (ii) fail to actively seek gainful employment, you will not receive any salary continuation payments.

Please sign both copies of this letter and return it to Jim Nemiah. If you have any questions, please feel free to call Jim or George Levan.

Sincerely,

David J. Aldrich
Vice President

AGREED TO:

Date:

EXHIBIT (10)(q)

April 30, 1996

Jean-Pierre Gillard
393 Bedford Road
Carlisle MA 01741

Re: Change in Control Agreement

Dear J.P.:

This letter is to confirm the agreement that we reached with regard to your employment with Alpha Industries, Inc. (the "Company").

1. If: (i) a Change in Control occurs within two years of the date of this letter, and (ii) your employment with the Company is voluntarily or involuntarily terminated within one year thereafter, then the Company will pay you up to one year of salary continuation in accordance with the terms and conditions of this letter.

2. A "Change in Control" shall be deemed to have occurred if the Continuing Directors shall have ceased for any reason to constitute a majority of the Board of Directors of the Company. For this purpose, a "Continuing Director" shall include any member of the Board of Directors of the Company as of the date of this letter and any person nominated for election to the Board of Directors of the Company by a majority of the then Continuing Directors.

3. If your employment with the Company is involuntarily terminated within two years of the date of this letter without Cause, then the Company will pay you up to one year of salary continuation in accordance with the terms and conditions of this letter.

4. "Cause" shall mean: (a) deliberate dishonesty detrimental to the best interests of the Company or any subsidiary, or (b) conduct constituting moral turpitude, or (c) willful disloyalty to the Company or your refusal or failure to obey the directions of your immediate supervisor or the Chief Executive Officer of the Company, or (d) incompetent performance or substantial or continuing inattention to or neglect of duties and responsibilities assigned to you.

5. Salary continuation payments under this letter will be reduced by the amount of any compensation that you receive from any person for services rendered during the salary continuation period. For any period in which you either: (i) engage in activities or enterprises (on behalf of yourself or others) that are directly competitive with any business activity of Alpha Industries, Inc. or any of its subsidiaries, or (ii) fail to actively seek gainful employment, you will not receive any salary continuation payments.

Please sign both copies of this letter and return it to Jim Nemiah. If you have any questions, please feel free to call Jim or George Levan.

Sincerely,

AGREED TO:

Martin J. Reid
President and CEO

Date: ---

MJR/jcn

EXHIBIT 11

Computation Of Per Share Data
(In thousands, except per share dollar amounts)

	Fiscal Year Ended March 30, 1997	March 31, 1996	April 2, 1995
Primary Computation			
Weighted average number of common shares outstanding	9,848	8,367	7,607
Weighted average number of common stock equivalents	--	388	275
Weighted average number of common shares and common share equivalents outstanding	9,848	8,755	7,882
Fully Diluted Computation			
Weighted average number of common shares outstanding	9,848	8,367	7,607
Weighted average number of common stock equivalents	--	388	287
Weighted average number of common shares and common share equivalents outstanding	9,848	8,755	7,894
Net income (loss) primary and fully diluted	$(15,572)	$ 3,794	$ 2,847
Net income (loss) per common share primary and fully diluted	$ (1.58)	$ .43	$ .36

Fiscal 1997 does not include common stock equivalents since the effect would have been antidilutive. For fiscal 1996 and 1995 common stock equivalents related to shares issuable under options outstanding did effect the per share amount and, accordingly were included in the computation.

Exhibit 21

Subsidiaries Of The Registrant

Name	Jurisdiction Of Incorporation
Alpha Industries Limited	England
Alpha Industries GmbH	Germany
Alpha Securities Corporation	Massachusetts
CFP Holding Company, Inc.	Washington
Trans-Tech, Inc.	Maryland
Trans-Tech Europe SARL	France

EXHIBIT 23

Consent of Independent Auditors

The Board of Directors
Alpha Industries, Inc.:

We consent to incorporation by reference in the registration statements (No. 33-32957, No. 33-11356 and No. 33-47901) on Form S-8 of Alpha Industries, Inc. of our report dated May 9, 1997 relating to the consolidated balance sheets of Alpha Industries, Inc. and subsidiaries as of March 30, 1997 and March 31, 1996 and the related consolidated statements of operations, stockholders' equity, and cash flows and related schedule for each of the years in the three-year period ended March 30, 1997, which report appears in the March 30, 1997 annual report on Form 10-K of Alpha Industries, Inc.

/s/ KPMG Peat Marwick LLP
KPMG PEAT MARWICK LLP
Boston, Massachusetts
June 27, 1997

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This schedule contains summary financial information extracted from the financial statements of Alpha Industries, Inc. and Subsidiaries as of and for the twelve months ended March 30, 1997 and is qualified in its entirety by reference to such financial statements.

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12-MOS
MAR-30-1997
MAR-30-1997
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521
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85,253
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98,505
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206
139
(15,572)
0
(15,572)
0
0
0
(15,572)
(1.58)
(1.58)