FORM 10-KSB SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

[x] Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act Of 1934 For the fiscal year ended February 28, 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 1-10655

ENVIRONMENTAL TECTONICS CORPORATION (Exact name of small business issuer in its charter)

Pennsylvania (State or other jurisdiction of incorporation or organization) 23-1714256 (I.R.S. Employer Identification No.)

County Line Industrial Park
Southampton, Pennsylvania
(Address of principal executive offices)

18966 (Zip Code)

Issuer's telephone number, including area code (215) 355-9100

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

Check whether the issuer (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 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

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B 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-KSB or any amendment to this Form 10-KSB.[x]

As of May 23, 1997, the aggregate market value of the Registrant's common stock held by non-affiliates of the Registrant was approximately \$13,027,378.

As of May 23, 1997, there were 2,971,101 shares of Registrant's common stock, \$0.10 par value per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE. Portions of Registrant's 1997 Annual Report to Stockholders are incorporated by reference in Part II, Items 5, 6, 7, and 8.

Transitional Small Business Disclosure Format: Yes No x

PART I

Item 1. Description of Business

(a) Business Development

The Company, a Pennsylvania corporation, incorporated in 1969, is principally engaged in the manufacture and sale of products used in controlling, modifying, simulating and measuring environmental factors such as temperature, humidity, pressure, and vacuum. These products include aircrew training systems, sterilizers, environmental and other products which involve similar manufacturing techniques and engineering technologies.

Since February 23, 1996, there has been no material change in the Company's mode of conducting business.

(b) Business of the Company

Principal Products

Aircrew Training Systems. The Company's aircrew training devices are used for medical research, advanced flight training, and for the indoctrination and testing of military and commercial pilots. The major devices sold in this product area are commercial flight simulators, high altitude decompression chambers, hyperbaric (high-pressurized oxygen) chambers, night vision trainers, water survival training equipment, disorientation training equipment, human centrifuges, and ejection seat trainers. The Company provides operation and maintenance services for installed equipment it manufactures as well as equipment produced by others.

The aircrew training system class of products represented 61% and 52% of consolidated revenues of the Company for the years ended February 28, 1997 and February 23, 1996, respectively.

Sterilizers. The Company manufactures steam and gas sterilizers. Steam sterilizers are used for hospital, medical research laboratory, and industrial purposes. Gas sterilizers are used for the sterilization of packaged products such as food, spices, pharmaceutical, and disposable and reusable medical devices. The Company's sterilizers range in price from approximately \$25,000 to over \$1,000,000, and in chamber size from three cubic feet to over 4,000 cubic feet, although the Company concentrates on marketing the larger custom-designed sterilizers to the pharmaceutical and medical device industries.

The sterilizer class of products represented 28% and 31% of consolidated revenues of the Company for the years ended February 28, 1997 and February 23, 1996, respectively.

Environmental Systems and Other Products. The Company's environmental systems business consists of the design and fabrication of sampling and analysis systems, and test equipment and systems used in measuring, monitoring and testing air pollution. The Company also designs and manufactures environmental simulation systems to meet specific needs of its customers. The simulation systems generally consist of an enclosed chamber with instrumentation and equipment which enable the customer to control and modify such environmental factors as temperature, pressure, humidity, wind velocity and gas content to produce desired conditions. These products include controlled air systems for automotive companies and environmental chambers.

The Company also provides repair and maintenance service for its own and other manufacturers' equipment.

Sales of these products were 11% and 17% of consolidated revenues of the Company for the years ended February 28, 1997 and February 23, 1997, respectively.

The Company currently markets its products and services primarily through its officers and employees. At February 28, 1997, approximately 16 employees were committed to sales and marketing functions. The Company uses branch offices in the United Kingdom, the Middle East, and Asia as well as the services of approximately 100 independent sales organizations in seeking foreign orders for its products.

Product Development

New products and improvements in existing products are being continually developed in response to inquiries from customers and to management's determination that particular products should be produced or significantly improved. Although the Company does not have a separate research and development group, significant efforts are expended in developing new applications of existing technologies.

The Company is currently focusing its product development efforts in the aircrew training systems segment, with a particular emphasis on enhancing the related control systems and software, and exploring commercial possibilities. The Company recently completed a Firefighting Command and Control System and Trainer for a certain foreign governmental agency. The control system is a real-time interactive training program that provides instructor-selective, computer-generated image scenarios that train and test a firefighter's ability to fight various types of aircraft fires. The trainer simulates fires in aircraft and structures that must be physically fought and controlled by a team of firefighters. The Company believes that this development will provide it with the potential for establishing a new standardized product for commercial as well as governmental use. Additionally, the Company believes this area will expand to training systems for other disaster situations.

The Company incurred research and development costs of approximately \$167,000 and \$154,000 for the years ended February 28, 1997 and February 23, 1996, respectively.

Supplies

The components being used in the assembly of systems and the parts used to manufacture the Company's products are purchased from equipment manufacturers, electronics supply firms and others. To date, the Company has had no difficulty in obtaining supplies. Further, all raw materials, parts, components, and other supplies used by the Company in the manufacture of its products can be obtained at competitive prices from alternate sources should existing sources of supply become unavailable.

Patents and Trademarks

The Company has no patents or trademarks which it considers significant to its operations, except a patent on the GYROLAB Spatial Disorientation Trainer which expires in December 2004.

Customers

In the current year and recent past, it has been the Company's experience that a substantial portion of sales are made to a small number of customers that vary within any given year. The Company's business does not depend upon repeat orders from these same customers. Sales of aircrew training systems are made principally to U.S. and foreign governmental agencies. Sales of sterilizers and environmental systems are made to commercial and governmental entities worldwide.

In fiscal 1997, the Company's major customers included the United Kingdom, Japan and the U.S. Government, which accounted for \$3,826,000, \$2,527,000 and \$2,082,000 of the Company's sales, respectively. These governmental entities do not have any relationship with the Company other than as customers.

Foreign and Domestic Operations and Export Sales

During the years ended February 28, 1997 and February 23, 1996, approximately \$2,082,000 (10%) and \$1,631,000 (10%), respectively, of the Company's net revenues were attributable to contracts with agencies of the U.S. Government or with other customers who had prime contracts with agencies of the federal government.

During the years ended February 28, 1997 and February 23, 1996, approximately \$15,422,000 (70%) and \$9,198,000 (59%), respectively, of the Company's net revenues were attributable to export sales or sales for export. (See Note 10 to the Company's consolidated financial statements incorporated herein by reference to the Annual Report.) On export sales, customers' obligations to the Company may be secured by irrevocable letters of credit.

The Company does not believe that the distribution of its sales for any particular period is necessarily indicative of the distribution expected for any other period.

A large portion of the Company's sales are under long-term contracts requiring more than one year to complete. The Company accounts for sales under long-term contracts on the percentage of completion basis. See Notes 1 and 3 to consolidated financial statements.

The Company's U.S. Government contracts contain standard terms permitting termination for the convenience of the Government. In the event of termination of such contracts, the Company is entitled to receive reimbursement on the basis of work completed (cost incurred plus a reasonable profit), recording the amounts anticipated to be recovered from termination claims in income as soon as those amounts can be reasonably determined rather than at the time of final settlement. All costs applicable to a termination claim are charged as an offsetting expense concurrently with the recognition of income from the claim.

Backlog

The Company's sales backlog at February 28, 1997 and February 23, 1996 for work to be performed and revenue to be recognized under written agreements after such dates was approximately \$25,800,000 and \$20,900,000, respectively. In addition, the Company's training and maintenance contracts backlog at February 28, 1997 and February 23, 1996 for work to be performed and revenue to be recognized after that date under written agreements was approximately \$5,100,000 and \$2,100,000, respectively. Of the 1997 backlog, approximately \$21,900,000 is under contracts for aircrew training systems and maintenance support principally for U.S. (approximately \$300,000) and foreign governments (approximately \$19,000,000). The U.S. Government contracts are subject to termination at the convenience of the Government with equitable cancellation cost recovery. Approximately 80% of the 1997 backlog is expected to be completed prior to February 27, 1998.

${\tt Competition}$

The Company's business strategy in recent years has been to

seek niche markets in which there are not numerous competitors. However, in some areas of its business the Company competes with well-established firms, some of which have substantially greater financial and personnel resources.

Some competitor firms have technical expertise and production capabilities in one or more of the areas involved in the design and production of physiological flight training equipment, environmental systems, and other specially designed products, and compete with the Company for this business. The competition for any particular project generally is determined by the technological requirements of the project, with consideration also being given to a bidder's reliability, product performance, past performance, and price.

The Company faces particularly intense competition from a number of firms in the sale of hospital sterilizers but faces less competition in the sale of the larger custom-designed industrial sterilizers.

The Company believes that it is a significant participant in the markets in which it competes, especially in aircrew training systems in which the Company believes it is a principal provider of this type of equipment and training in its market area.

Compliance with Environmental Laws

The Company has not incurred during fiscal 1997 nor does it anticipate incurring during fiscal 1998 any material capital expenditures to maintain compliance with Federal, state and local statutes, rules and regulations concerning the discharge of materials into the environment, nor does the Company anticipate that compliance with these provisions will have a material adverse effect on its earnings or competitive position.

Employees

On February 28, 1997, the Company had 189 full-time employees, of whom 7 were employed in executive positions, 31 were engineers, engineering designers, or draftpeople, 67 were administrative (sales, accounting, etc.) and clerical personnel, and 84 were engaged principally in production and operations.

Item 2. Description of Property

The Company owns its executive offices and principal production facilities located on a 5-acre site in the County Line Industrial Park, Southampton, Pennsylvania in an approximately 70,000 square foot steel and masonry building. Approximately 55,000 square feet are devoted to manufacturing, and 15,000 square feet to office space. The original building was erected in 1969 and additions were made in 1973, 1976, 1985 and 1991. This property collateralizes the Company's revolving credit facility.

The Company considers its machinery and plant to be in satisfactory operating condition and adequate for the Company's present level of business. Increases in the level of operations beyond that expected in the current fiscal year might require the Company to obtain additional facilities and equipment.

Item 3. Legal Proceedings

In October 1993, the Company was notified by the Royal Thai Air Force (the "RTAF") that the RTAF was terminating a certain \$4.6 million simulator contract with the Company. Although the Company had performed in excess of 90% of the contract, the RTAF alleged a failure to completely perform. In connection with this

termination, the RTAF made a call on a \$229,000 performance bond, as well as a draw on approximately \$1.1 million of advance payment letters of credit. On October 1, 1996, the Thai Trade Arbitration Counsel rendered a decision in favor of the Company pursuant to which the contract was reinstated in full and the Company was given a period of nine months to complete the remainder of the work. Upon completion of the contract, the RTAF will pay the Company the open receivables balance, consisting of the performance bond and the advance payment, plus the 10% due on the balance of the contract. Based on the progress to date and recent discussions with the RTAF, the Company estimates it will probably exceed the nine month contract completion period due to an extended delay in obtaining an export license for certain hardware required to complete the project. This license has now been received and the hardware has been obtained. The Company has submitted a request for a contract extension under the "force majeure" clause of the RTAF contract, and the RTAF has agreed to an extension to complete the installation and training. If the Company experiences additional delays that are not approved by the RTAF, the RTAF could invoke penalties against the Company, including termination of the contract and delay penalties.

A lawsuit was commenced against the Company in April 1997 in the United States District Court for the District of Puerto Rico by an employee of a customer who claims to have been injured as a result of an alleged malfunction of a sterilizer manufactured by the Company. The plaintiff is seeking \$3 million in damages. Based on the available information, the Company believes that it possesses meritorious defenses to such action. The Company has up to \$10 million of products liability coverage, subject to a \$100,000 deductible. The Company has notified its insurer of the lawsuit, and the Company's insurer has engaged counsel to defend the Company in this matter.

Certain other claims, suits and complaints arising in the ordinary course of business have been filed or are pending against the Company. In the opinion of management, all such matters are reserved for or are adequately covered by insurance or, if not so covered, are without merit or are of such kind, or involve such amounts as would not have a significant effect on the financial position of the Company if disposed of unfavorably.

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

None.

PART II

Item 5. Market for the Registrant's Common Stock and Related Security Holder Matters

See information appearing under the heading "Market for the Registrant's Common Stock and Related Stockholder Matters" in the Annual Report, attached hereto as Exhibit 13 and incorporated herein by reference.

Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operations

See information appearing under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report, attached hereto as Exhibit 13 and incorporated herein by reference.

Item 7. Financial Statements

See the information appearing under the headings "Consolidated Financial Statements" and "Notes to Consolidated

Financial Statements" in the Annual Report, attached hereto as Exhibit 13 and incorporated herein by reference.

Item 8. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure ${\cal A}$

Not applicable.

PART III

The following table sets forth certain information with respect to the directors of the Registrant:

Name	Di	rector Officer	Principal Occupations and Positions and Offices with the Company
William F. Mitchell(2)	55	1969	Chairman of the Board, President and Director
Richard E. McAdams(3)	61	1985	Executive Vice President and Director
Philip L. Wagner, Ph.D.(4)	60	1993	Director
Pete L. Stephens, M.D.(5)	59	1974	Director
Michael A. Mulshine(6)	57	1994	Director
Duane D. Deaner(7)	49	1996	Chief Financial Officer

- (1) Directors serve one-year terms.
- (2) Mr. Mitchell has been Chairman of the Board, President and Chief Executive Officer of the Company since 1969, except for the period from January 24, 1986 through January 24, 1987, when he was engaged principally in soliciting sales for the Company's products in the overseas markets.
- (3) Mr. McAdams has been with the Company since 1970. He became a Vice President in 1978 with responsibility for contract administration. Mr. McAdams became Executive Vice President of the Company in 1990.
- (4) Dr. Wagner is an organic chemist with over 30 years of diversified experience managing research and development and new business development at E.I. du Pont de Nemours & Company and thereafter founded Chadds Ford Technologies, Inc., a consulting firm. He is currently President of Chadds Ford Technologies, Inc.
- (5) Dr. Stephens has been a physician engaged in the private practice of medicine for $30\ \mathrm{years}$.
- (6) Mr. Mulshine has served as a Director of VASCO Corporation, a public company in the computer data security business, since 1991. He has been President of Osprey Partners, a management consulting firm, since 1977. He is Chairman of the Board of Dynex Sport Optics, Inc., an exclusive licensee

of Wilson Sporting Goods Company, and has been a Director and Secretary of Scangraphics, Inc., a public company, since 1985. Mr. Mulshine is an instrument-rated pilot who served as General Manager of a flight simulator company and was involved in simulation and modeling in his early career. He received a Bachelor of Science degree in Electrical Engineering in 1961 from Newark College of Engineering.

(7) Mr. Deaner has served as Chief Financial Officer of the Company since January 1996. Mr. Deaner served as Vice President of Finance for Pennfield Precision Incorporated from September 1988 to December 1995.

Committees of the Board of Directors

During the year ended February 28, 1997, the Company had an Audit Committee consisting of three independent outside directors: Messrs. Michael A. Mulshine, Philip L. Wagner and Dr. Pete L. Stephens. These three independent outside directors also served on the Company's Compensation Committee during the year ended February 28, 1997. The Audit Committee is charged with reviewing and overseeing the Company's financial systems and internal control procedures and conferring with the Company's independent accountants with respect thereto. The Compensation Committee is charged with reviewing the compensation of officers and key personnel.

During the year ended February 28, 1997, the Board of Directors held 6 meetings and the Audit Committee and Compensation Committee each held 1 meeting. All members of the Board attended all of the meetings of the Board held while they were members of the Board. All members of the Audit Committee and Compensation Committee attended all meetings of the Committee held while they were members thereof.

Compliance With Section 16(a) of the Exchange Act

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's officers and directors, and persons who own more than ten percent of a registered class of the Company's equity securities to file reports of ownership and changes in ownership with the Securities and Exchange Commission ("SEC") and the American Stock Exchange. Officers, directors and greater than ten percent shareholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) Forms they file. The rules of the SEC regarding the filing of such statement require that "late filings" of such statements be disclosed in the Company's proxy statement.

Based solely on its review of the copies of such forms received by it, or written representations from certain reporting persons that no Forms 5 were required for those persons, the Company believes that, during the fiscal year ended February 28, 1997, its officers, directors and greater than ten percent beneficial owners complied with all applicable filing requirements.

Item 10. Executive Compensation

REMUNERATION OF DIRECTORS AND OFFICERS

The following table sets forth compensation paid by the Company to the Chief Executive Officer for services rendered during fiscal years 1997, 1996 and 1995. There are no other executive officers whose total annual salary and bonus exceeds \$100,000. The footnotes to the table provide additional information concerning the Company's compensation and benefit programs.

SUMMARY COMPENSATION TABLE

Annual Compensation

Name and Principal Position	Fiscal Year	Salary(\$)	Bonus(\$)	Other Annual Compen- sation(\$)(1)	All Other Compen- sation(\$)(2)
William F.	1997	\$113 , 780	\$ -	\$ -	\$2 , 731
Mitchell,	1996	119,531	_	_	2,473
President	1995	131,568	_	_	1,154
and Chief					
Executive					
Officer					

- (1) The Company's executive officers receive certain perquisites. For fiscal years 1997, 1996 and 1995, the perquisites received by Mr. Mitchell did not exceed the lesser of \$50,000 or 10% of his salary and bonus.
- (2) These amounts represent the Company's contribution to the Retirement Savings Plan.

Directors of the Company who are not officers of the Company are paid \$600 for Board of Directors meetings which they attend. Additional compensation is not paid for committee meetings.

Item 11. Security Ownership of Certain Beneficial Owners and $$\operatorname{\mathtt{Management}}$$

The following table sets forth as of May 23, 1997, the number of shares and percentage of the Company's Common Stock owned beneficially by each director, each executive officer named in the Summary Compensation Table, and each person holding, to the Company's knowledge, more than 5% of the outstanding Common Stock. The table also sets forth the holdings of all directors and executive officers as a group.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	of
William F. Mitchell (1) c/o Environmental Tectonics Corporation County Line Industrial Park Southampton, PA 18966	943,949	31.8%
Pete L. Stephens, M.D. (2) 1 Eleni Lane West Chester, PA 19382	317,275(3)	10.7%
Richard E. McAdams (4) c/o Environmental Tectonics Corporation County Line Industrial Park Southampton, PA 18966	27,526(5)	*
Michael A. Mulshine (6) Osprey Partners 2517 Route 35	0	*

Philip L. Wagner, Ph.D. (7) Chadds Ford Technologies, Inc. P.O. Box 377 Chadds Ford, PA 19317

6,000(8)

All directors and executive officers as a group (6 persons) 1,295,875(9)

43.5%

* less than 1%

- (1) Chairman of the Board, President and Director of the Corporation.
- (2) Director of the Corporation.
- Includes 8,975 shares held by or for the benefit of Dr. Stephens' wife and two of his children.
- (4) Director of the Corporation.
- Includes options to purchase 8,000 shares held under the Company's Incentive Stock Option Plan that are presently exercisable.
- (6) Director of the Corporation.
- (7) Director of the Corporation.
- Includes 4,000 shares held by or for the benefit of (8) Dr. Wagner's wife.
- Includes options to purchase 9,125 shares held under the Company's Incentive Stock Option plan that are presently exercisable.

Item 12. Certain Relationships and Related Transactions

Set forth below is information concerning loans made to the Company by certain affiliates.

			Outstanding Principal		
		Original Principal	Balance of Loan as of	Annual Percentage	
Name of	Date of	Amount	March 27,	Interest	Maturity
Lender(s)	Loan	of Loan	1997	Rate	Date
Pete L. Stephens(1)	12/11/96	\$100,000.00	\$100,000.00	10%	1/1/98
Pete L. Stephens(1)	1/2/97	\$ 60,000.00	\$ 60,000.00	10%	1/1/98
Pete L. Stephens(1)	1/8/97	\$100,000.00	\$100,000.00	10%	1/1/98
Pete L. and Anita Stephens (2)	1/8/97	\$ 40,000.00	\$ 40,000.00	10%	1/1/98
John Mitchell(3)	1/8/97	\$400,000.00	\$400,000.00	10%	1/1/98
Christine Walters(4)	1/8/97	\$ 35,000.00	\$ 35,000.00	10%	1/1/98
Christine Walters(4)	1/8/97	\$165,000.00	\$165,000.00	10%	1/1/98
William F. Mitchell(5)	2/7/97	\$300,000.00	\$300,000.00	10%	1/1/98

- (1)Director of the Corporation.
- (2) Mr. Stephens is a director of the Corporation. Ms. Stephens is the spouse of Director Stephens.
- Mr. John Mitchell is the brother of William F. Mitchell, Chairman of the Board, President and Director of the Corporation.
- Christine Walters is the daughter of William F. Mitchell, Chairman of the Board, President and Director of the

Corporation.

(5) Mr. Mitchell is Chairman of the Board, President and Director of the Corporation.

Item 13. Exhibits and Reports on Form 8-K

(a) Exhibits:

Number Item

- 3.1 Registrant's Articles of Incorporation, as amended.
- 3.2 Registrant's By-Laws, as amended, were filed as Exhibit 3(ii) to Registrant's Form 10-K for the year ended February 25, 1994 and is incorporated herein by reference.
- 4.1 12% Subordinated Debenture due March 27, 2004.
- 10.1 Chief Executive Compensation Plan,
 Executive Management/Key Employee
 Compensation Plan, General
 Compensation Policy was filed as
 Exhibit 10(i) to the Registrant's
 Form 10-K for the year ended
 February 25, 1994 and is
 incorporated herein by reference.*
- 10.2 Registrant's 1988 Incentive Stock
 Option Plan was filed as
 Exhibit 10(v) to Registrant's
 Form 10-K for the year ended
 February 23, 1990 and is
 incorporated herein by reference.*
- 10.3 Registrant's Employee Stock
 Purchase Plan was filed on July 6,
 1988 as Exhibit A to the Prospectus
 included in Registrant's
 Registration Statement (File
 No. 33-42219) on Form S-8 and is
 incorporated herein by reference.*
- 10.4 Registrant's Stock Award Plan adopted April 7, 1993, filed as Exhibit 10(ix) to the Registrant's Form 10-K for the fiscal year ended February 25, 1994 and is incorporated herein by reference.*
- 10.5 Form of 1996 Warrant Agreement between the Registrant and Chase Manhattan Capital Corporation, filed as Exhibit 10(xiv) to the Registrant's Form 10-KSB for the fiscal year ended February 23, 1996 and is incorporated herein by reference.
- 10.6 Revolving Credit Agreement, dated as of March 27, 1997, between the Registrant and First Union National Bank.
- 10.7 Debenture Purchase Agreement, dated

March 27, 1997, between the Registrant and Sirrom Capital Corporation.

- 10.8 Preferred Stock Purchase Agreement, dated March 27, 1997, between the Registrant and Sirrom Capital Corporation.
- 10.9 Stock Purchase Warrant, dated March 27, 1997, issued by the Registrant to Sirrom Capital Corporation.
- Portions of Registrant's 1997 Annual Report to Shareholders which are incorporated by reference into this Form 10-KSB.
- 21 List of subsidiaries.
- 23 Consent of Grant Thornton L.L.P.
- 27 Financial Data Schedule
- -----
- * Represents a management contract or a compensatory plan or arrangement.
- (b) Reports on Form 8-K:

None.

SIGNATURES

In accordance with Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ENVIRONMENTAL TECTONICS CORPORATION

By/s/ William F. Mitchell
William F. Mitchell, President
and Chief Executive Officer

In accordance with 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 and on the dates indicated.

Name	Position	Date
/s/ William F. Mitchell William F. Mitchell	Chairman of the Board, President and Director	June 12, 1997
/s/ Duane D. Deaner Duane D. Deaner	Chief Financial Officer (Principal Accounting Officer)	June 12, 1997
/s/ Richard E. McAdams Richard E. McAdams	Director	June 12, 1997
/s/ Michael A. Mulshine Michael A. Mulshine	Director	June 12, 1997
/s/ Pete L. Stephens Pete L. Stephens, M.D.	Director	June 12, 1997

Director

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21 List of subsidiaries.

10.9

23 Consent of Grant Thornton L.L.P.

27 Financial Data Schedule

^{*} Represents a management contract or a compensatory plan or arrangement.

Restated

Articles of Incorporation

of

Environmental Tectonics Corporation

* * *

1. The name of the corporation is:

Environmental Tectonics Corporation

2. The location and post office address of its registered office in the Commonwealth of Pennsylvania is:

C/O Blank, Rome, Klaus & Comisky Four Penn Center Plaza Philadelphia, Pennsylvania 19103

- 3. The purposes for which the corporation is incorporated are to have unlimited power to engage in and to do any lawful act concerning any or all lawful business for which corporations may be incorporated under the Business Corporation Law of the Commonwealth of Pennsylvania, including without limitation to manufacture, process, own, use and deal in and with personal property of every class and description; to engage in research and development to furnish services; to acquire, own, use and dispose of real property of any nature whatsoever and to design, develop, produce, manufacture and dispose of environmental, electronic and other systems, equipment and products.
- 4. The corporation is incorporated under the provisions of the Business Corporation Law of the Commonwealth of Pennsylvania.
- 5. The term for which the corporation is to exist is perpetual.
- 6. The aggregate number of shares which the corporation shall have authority to issue is 1,500,000 shares of common stock, par value \$.10 per share.
- 7. The shareholders of the corporation shall not be entitled to vote cumulatively for the election of directors.

Executed this 24 day of August 1971.

Filed in the Department of State on August 27, 1971.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF STATE
CORPORATION BUREAU

Statement of Change of Registered Office --Domestic Business Corporation

In compliance with the requirements of section 307 of the Business Corporation Law, act of May 5, 1933 (P.L. 364) (15 P.S. Section 1307) the undersigned corporation, desiring to effect a change in registered office, does hereby certify that:

1. The name of the corporation is:

ENVIRONMENTAL TECTONICS CORPORATION

2. The address of its present registered office in this Commonwealth is (the Department of State is hereby authorized to correct the following statement to conform to the records of the Department):

c/o Blank, Rome, Klaus & Comisky Four Penn Center Plaza Philadelphia, Pennsylvania 19103

3. The address to which the registered office in this Commonwealth is to be changed is:

James Way County Line Industrial Park Southampton, Pennsylvania 18966

4. Such change was authorized by resolution duly adopted by at least a majority of the members of the board of directors of the corporation.

IN TESTIMONY WHEREOF, the undersigned corporation has caused this statement to be signed by a duly authorized officer, and its corporate seal, duly attested by another such officer, to be hereunto affixed, this 24th day of July, 1984.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF STATE
CORPORATION BUREAU

Articles of Amendment --Domestic Business Corporation

In compliance with the requirements of section 806 of the Business Corporation Law, act of May 5, 1933 (P.L. 364) (15 P.S. Section 1806) the undersigned corporation, desiring to amend its Articles, does hereby certify that:

1. The name of the corporation is:

ENVIRONMENTAL TECTONICS CORPORATION

> James Way County Line Industrial Park Southampton, Pennsylvania 18966

- 3. The statute by or under which it was incorporated is: The Act of May 5, 1933, P.L. 364.
 - 4. The date of its incorporation is: August 11, 1969.
- 5. (Check, and if appropriate, complete one of the following):
 - [X] The meeting of the shareholders of the corporation at which the amendment was adopted was held at the time and place and pursuant to the kind and period of notice herein stated.

Time: The 18th day of April, 1985.

Place: Company Offices, James Way, County Line

Industrial Park, Southampton, PA

Kind and period of notice: 29 days written notice

[] The amendment was adopted by a consent in writing, setting forth the action so taken, signed by all of the shareholders entitled to vote thereon and filed with the Secretary of the corporation.

- 6. At the time of the action of shareholders:
 - (a) The total number of shares outstanding was: 1,363,869 shares of Common Stock.
 - (b) The number of shares entitled to vote was: 909,307 shares of Common Stock, being all of the shares outstanding on the record date, March 11, 1985.
- 7. In the action taken by the shareholders.
 - (a) The number of shares voted in favor of the amendment was:

774,034 shares

(b) The number of shares voted against the amendment was:

7,992 shares

8. The amendment adopted by the shareholders, set forth in full, is as follows:

"RESOLVED, that Paragraph 6 of the Articles of Incorporation of Environmental Tectonics Corporation be and hereby is amended to read as follows:

'6. The aggregate number of shares which the corporation shall have authority to issue is 10,000,000 shares of common stock, par value \$.10 per share.'"

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by a duly authorized officer, and its corporate seal, duly attested by another such officer, to be hereunto affixed, this 24th day of April, 1985.

STATEMENT WITH RESPECT TO SHARES-DOMESTIC BUSINESS CORPORATION

In connection with the requirements of 15 Pa.C.S. Section 1522(b) (relating to statement with respect to shares), the undersigned corporation, desiring to state the designation and voting rights, preferences, limitations, and special rights, if any, of a class or series of its shares, hereby states that:

- The name of the corporation is: Environmental Tectonics Corporation.
- 2. (Check and complete one of the following):
 - ____ The resolution amending the Articles under 15 Pa.C.S. Section 1522(b) (relating to divisions and determinations by the board), set forth in full, is as

follows:

- X The resolution amending the Articles under 15 Pa.C.S. Section 1522(b) is set forth in full in Exhibit A attached hereto and made a part hereof.
- 3. The aggregate number of shares of such class or series established and designated by (a) such resolution, (b) all prior statements, if any, filed under 15 Pa.C.S. Section 1522 or corresponding provisions of prior law with respect thereto, and (c) any other provision of the Articles is 25,000 shares.
- 4. The resolution was adopted by the Board of Directors or an authorized committee thereof on: March 26, 1997.
- 5. (Check, and if appropriate complete, one of the following):
 - X The resolution shall be effective upon the filing this statement with respect to shares in the Department of State.

 The	res	olution	shall	be	effective	on:	
(Dat	e)	at					_ (Hour)

IN TESTIMONY WHEREOF, the undersigned corporation has caused this statement to be signed by a duly authorized officer thereof this $27 \, \text{th}$ day of March, 1997.

EXHIBIT A

STATEMENT WITH RESPECT TO SHARES

OF

ENVIRONMENTAL TECTONICS CORPORATION

RESOLVED, that pursuant to the powers expressly delegated to the Board of Directors by Article 4 of the Articles of Incorporation of the Company, the Company hereby establishes and designates one series of preferred stock and fixes and determines as set forth herein the relative rights and preferences thereof as follows:

Designation. There shall be established a series of preferred stock, which shall consist of 25,000 shares of the authorized preferred stock and shall be designated Series A Convertible Preferred Stock (herein referred to as the "Preferred Stock").

Dividends.

(a) The holders of Preferred Stock shall be entitled to receive dividends (the "Preferred Dividend") at the rate of \$11.00 per share per annum (as adjusted for any stock dividends, combinations, or splits with respect to such shares) on a cumulative basis from the actual date of original issue of each share of Preferred Stock (the "Original Issue Date"), whether or not declared, payable out of funds legally available therefor, on the first day of each February, May, August, and November in each year (each a "Dividend Payment Date"). Payments shall commence on the first such date to occur after the Original Issue Date, to the holders of record of the Preferred Stock on the fifteenth day of the month preceding each Dividend Payment Date, in the amount of \$2.75 per share on each Dividend Payment Date, and payable in the event of a liquidation, dissolution or winding up of the

Company (whether voluntary or involuntary) or upon conversion of the Preferred Stock as provided in Section 5 and Section 7(a) hereof.

- (b) No dividends (other than those payable solely in the Common Stock of the Company) shall be paid on any Common Stock of the Company during any fiscal year of the Company until dividends in the amount of \$11.00 per share of the Preferred Stock (as adjusted for any stock dividends, combinations or splits with respect to such shares) shall have been paid, or declared and set apart during that fiscal year and for any prior year in which dividends have accumulated but remain unpaid.
- (c) In the event that either (i) the Company fails to pay the Preferred Dividend on six (6) consecutive Dividend Payment Dates, or (ii) the aggregate amount of all accumulated but unpaid dividends shall equal or exceed the amount of \$16.50 per share of Preferred Stock, then the holders of the Preferred Stock shall have the right immediately to elect that number of members to the Board of Directors as shall constitute a majority of the Board of Directors. This right to elect a majority of the members of the Board of Directors shall continue until all accumulated but unpaid Preferred Dividends shall have been paid in full.

Liquidation, Dissolution, or Winding Up.

- (a) In the event of any liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary, the holders of the Preferred Stock shall be entitled to be paid first out of the assets of the Company available for distribution to holders of the Company's capital stock of all classes and before any sums shall be paid or any assets distributed among the holders of shares of any other class or series of capital stock of the Company, including Common Stock, an amount per share equal to One Hundred Dollars (\$100.00) plus the cumulative dividend as set forth in Section 2(a) hereof whether or not declared, plus an amount equal to all other accrued but unpaid Preferred Dividends (the "Preference Amount"). The Preference Amount shall be tendered to the holders of the Preferred Stock before any sums shall be paid or any assets distributed to the holders of the shares of any other class or series of capital stock, including without limitation Common Stock. If the assets of the Company shall be insufficient to permit the payment in full to the holders of the Preferred Stock of the amounts thus distributable, then the entire assets of the Company available for such distribution shall be distributed ratably among the holders of the Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive. After such payment shall have been made in full to the holders of the Preferred Stock or funds necessary for such payment shall have been set aside by the Company in trust for the account of holders of the Preferred Stock so as to be available for such payment, holders of the Preferred Stock shall not be entitled to participate in the distribution of any remaining assets of the Company.
- (b) Any consolidation, merger or a statutory share exchange (other than a merger with a wholly-owned subsidiary of the Company or a consolidation, merger, share exchange or other business combination in which the outstanding voting stock of the Company immediately prior to such consolidation, merger, share exchange or business combination constitutes a majority of the voting stock of the surviving entity) in which the outstanding shares of capital stock of the Company are exchanged for securities or other consideration of or from another corporation, or a sale of all or substantially all the assets or stock of the Company, shall be deemed to be a liquidation, dissolution, or winding up of the affairs of the Company within the meaning of

this Section 3, and shall entitle the holders of the Preferred Stock to receive on the effective date of such event the Preference Amount, in cash, securities or other property; provided, however, that any such event shall not be so regarded as a liquidation, dissolution, or winding up of the affairs of the Company with respect to the Preferred Stock if the holders of two-thirds (2/3) of the outstanding shares of the Preferred Stock elect not to have any such event deemed to be a liquidation, dissolution, or winding up of the affairs of the Company by giving written notice thereof to the Company at least ten (10) days prior to the effective date of such event.

- (c) Whenever the distribution provided for in this Section 3 shall be paid in property other than cash, the value of such distribution shall be the fair value thereof determined in good faith by the Board of Directors of the Company.
- J\O In the event that outstanding shares of Preferred Stock shall be subdivided into a greater number of shares of Preferred Stock, the Preference Amount in effect immediately prior to each such subdivision, simultaneously with the effectiveness of such subdivision, shall be proportionately reduced, and, conversely, in case outstanding shares of Preferred Stock shall be combined into a smaller number of shares of Preferred Stock, the Preference Amount in effect immediately prior to each such combination, simultaneously with the effectiveness of such combination, shall be proportionately increased.

Voting Rights; Directors.

- (a) Except as otherwise required by law, or as specifically provided herein, the holders of shares of Preferred Stock and Common Stock shall vote together as a single class on all matters submitted to a vote of the stockholders of the Company, with each holder of Preferred Stock entitled to that number of votes equal to the number of shares of Common Stock which would be issuable upon conversion of such shares of Preferred Stock, as provided in Section 5(a) hereof (the "As Converted Number of Shares") of such holder (with fractional shares rounded up or down to the nearest whole number) at the record date for the determination of stockholders entitled to vote on such matters or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is solicited. The holders of the Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Company.
- (b) For so long as at least thirty-three and one-third percent (33 1/3%) of the number of shares of Preferred Stock issued on the Original Issue Date remain outstanding, the holders of the Preferred Stock, voting separately as a class, shall be entitled to elect one (1) member of the Board of Directors. The holders of the Preferred Stock shall vote together with holders of the Common Stock as a single class as provided in Section 4(a) above for the election of all other members of the Board of Directors provided that the Board of Directors shall not consist of more than six (6) members.

Conversion Rights. The holders of the Preferred Stock shall have the following conversion rights:

(a) Right to Convert. Each share of Preferred Stock shall be convertible at any time, at the option of the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing One Hundred Dollars (\$100.00) (the "Numerator") by the Conversion Price (as defined below) in effect at the time of conversion, provided that all

shares held by such holder are so converted. The conversion price at which shares of Common Stock shall be deliverable upon conversion of Preferred Stock without the payment of additional consideration by the holder thereof (the "Conversion Price") initially shall be six dollars (\$6.00). Such initial Conversion Price, and the rate at which shares of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. In the event of a liquidation of the Company, the conversion rights shall terminate at the close of business on the first full day preceding the date fixed for the payment of any amounts distributable on liquidation to the holders of Preferred Stock.

- (b) Adjustment to Conversion Price Upon Occurrence of Extraordinary Common Stock Event. Upon the happening of an Extraordinary Common Stock Event (as hereinafter defined), the Conversion Price for the Preferred Stock, simultaneously with the happening of such Extraordinary Common Stock Event, shall be adjusted by multiplying the then-effective Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Common Stock Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Common Stock Event, and the product so obtained thereafter shall be the Conversion Price for the respective series of Preferred Stock. The Conversion Price, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Common Stock Event(s). "Extraordinary Common Stock Event" shall mean (i) the issuance of additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (ii) a stock split or subdivision of outstanding shares of Common Stock into a greater number of shares of Common Stock, or (iii) a reverse stock split or combination of outstanding shares of Common Stock into a smaller number of shares of Common Stock.
- (c) Recapitalization or Reclassification. If the Common Stock issuable upon the conversion of the Preferred Stock shall be changed into the same or a different number of shares of any class or classes of stock of the Company, whether by recapitalization, reclassification, or otherwise (other than a subdivision or combination of shares or stock dividend provided for in Section 5(b) hereof, or a reorganization, merger, share exchange, consolidation, or sale of assets provided for in Section 5(d) hereof), then and in each such event the holder of each share of Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of stock and other securities and property receivable upon such recapitalization, reclassification, or other change by holders of the number of shares of Common Stock into which such share of Preferred Stock might have been converted immediately prior to such recapitalization, reclassification, or change, all subject to further adjustment as provided herein.
- (d) Capital Reorganization, Merger, Share Exchange, Consolidation, or Sale of Assets. If at any time or from time to time there shall be a capital reorganization of the Common Stock, including a merger, share exchange, consolidation, or sale of all or substantially all of assets of the Company (other than a subdivision or combination of shares or stock dividend provided for in Section 5(b) hereof or a recapitalization or reclassification provided for in Section 5(c) hereof), then, as a part of such reorganization, provision shall be made so that the holders of the Preferred Stock thereafter shall be entitled to receive, upon conversion of each share of the Preferred Stock, the number of shares of stock or other securities or property to which a holder of the number of shares of Common Stock into which such shares of Preferred Stock might have been converted

immediately prior to such capital reorganization would have been entitled to receive. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 5 with respect to the rights of the holders of the Preferred Stock after the reorganization to the end that the provisions of this Section 5 (including adjustment of the Conversion Price then in effect and the number of shares acquired upon conversion of the Preferred Stock) shall be applicable after that event in as nearly equivalent a manner as may be practicable. In the case of a consolidation, merger, share exchange, or sale of all or substantially all the assets of the Company, the provisions of Section 3(b) shall apply, and this Section 5(d) shall not apply, unless the holders of two-thirds (2/3) of outstanding shares of a series of Preferred Stock elect that such event shall not be deemed to be a liquidation, dissolution, or winding up of the affairs of the Company (such election to be exercised by the holders of two-thirds (2/3) of the outstanding shares of a series of Preferred Stock by providing written notice to the Company of such election at least ten (10) days prior to the date of such consolidation, merger, share exchange, or sale of all or substantially all the assets of the Company).

- (e) Certificate as to Adjustments. In each case of an adjustment or readjustment of the Conversion Price of the Preferred Stock, the Company will furnish each holder of the Preferred Stock with a certificate prepared by the Chief Financial Officer of the Company showing such adjustment or readjustment and stating in detail the facts upon which such adjustment or readjustment is based.
- (f) Exercise of Conversion Privilege. To exercise its conversion privilege, a holder of Preferred Stock shall surrender the certificate(s) representing the shares being converted to the Company at its principal office, accompanied by written notice to the Company at that office that such stockholder elects to convert such shares (a "Conversion Notice"). The Conversion Notice also shall state the name(s) and address(es) in which the certificate(s) for shares of Common Stock issuable upon such conversion shall be issued. The certificate(s) for shares of Preferred Stock surrendered for conversion shall be accompanied by proper assignment thereof to the Company or in blank. The date when the Conversion Notice is received by the Company together with the certificate(s) representing the shares of Preferred Stock being converted shall be the "Conversion Date." As promptly as practicable after the Conversion Date, the Company shall issue and deliver to the holder of the shares of Preferred Stock being converted, or on its written order, such certificate(s) as it may request of the number of whole shares of Common Stock issuable upon the conversion of such shares of Preferred Stock in accordance with the provisions of this Section 5 and cash, as provided in Section 5(g), in respect of any fraction of a share of Common Stock issuable upon such conversion. Such conversion shall be deemed to have been effected immediately prior to the close of business on the Conversion Date, and at such time the rights of the holder as a holder of the converted shares of Preferred Stock shall cease and the person(s) in whose name(s) any certificate(s) for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder(s) of record of the shares of Common Stock represented thereby.
- (g) Cash in Lieu of Fractional Shares. No fractional shares of Common Stock or scrip representing fractional shares shall be issued upon the conversion of shares of Preferred Stock. Instead of any fractional shares of Common Stock that otherwise would be issuable upon conversion of a series of Preferred Stock, the Company shall pay to the holder of the shares of Preferred

Stock that were converted a cash adjustment in respect of such fractional shares in an amount equal to the same fraction of the Fair Market Value price per share of the Common Stock at the close of business on the Conversion Date. "Fair Market Value" shall mean (i) in the case of a security listed or admitted to trading on any securities exchange, the last reported sale price, regular way (as determined in accordance with the practices of such exchange), on such day, or if no sale takes place on such day, the average of the closing bid and asked prices on such day (and in the case of a security traded on more than one national securities exchange, at such price or such average, upon the exchange on which the volume of trading during the last calendar year was the greatest), (ii) in the case of a security not then listed or admitted to trading on any securities exchange, the last reported sale price on such day, or if no sale takes place on such day, the average of the closing bid and asked prices on such day, as reported by a reputable quotation service designated by the Company, (iii) in the case of a security not then listed or admitted to trading on any securities exchange and as to which no such reported sale price or bid and asked prices are available, the average of the reported high bid and low asked prices on such day, as reported by a reputable quotation service, or the Wall Street Journal, or if there are no bids and asked prices on such day, the average of the high bid and low asked prices, as so reported, on the most recent day (not more than 30 days prior to the date in question) for which prices have been so reported, and (iv) in the case of a security determined by the Company's Board of Directors as not having an active quoted market or in the case of other property, such fair market value as shall be determined by the Board of Directors. The determination as to whether any fractional shares are issuable shall be based upon the total number of shares of Preferred Stock being converted at any one time by any holder thereof, not upon each share of Preferred Stock being converted.

- (h) Reservation of Common Stock. The Company at all times shall reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as from time to time shall be sufficient to effect the conversion of all outstanding shares of the Preferred Stock, and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Company shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.
- (i) Special Adjustment of Conversion Price. In the event that the Company enters into a written agreement with the United Kingdom Ministry of Defense prior to July 31, 1997, providing for payments to the Company of \$19,000,000, then the Conversion Price shall automatically, be adjusted to \$7.50, subject to further adjustment as set forth in Section 5.

Restrictions and Limitations.

- (a) Voting as a Class. So long as any shares of Preferred Stock remain outstanding, the Company will not take any of the following actions without the affirmative vote or consent (with each share of Preferred Stock being entitled to one vote) of the holders of at least a majority of the outstanding shares of the Preferred Stock, given in writing or by resolution adopted at a meeting called for such purpose:
 - (i) redeem, purchase or otherwise acquire for value (or pay into or set aside for a sinking fund for such

purpose) any share or shares of Preferred Stock otherwise than by redemption of Preferred Stock in accordance with Section 7 hereof or by conversion in accordance with Section 5 hereof;

- (ii) redeem, purchase or otherwise acquire (or pay into or set aside for a sinking fund for such purpose) any of the Common Stock, except for (A) the purchase of rights to exercisable options under the Company's 1988 Incentive Stock Option Plan in an amount not to exceed the difference between the exercise price of such option and the Fair Market Value of the Common Stock on the date of purchase by the Company, or (B) the purchase of the warrant for 100,000 shares of Common Stock held by Chase Manhattan Capital Corporation, for an amount not to exceed \$375,000;
- (iii) authorize or issue, or obligate itself to issue, any other equity security senior to or on a parity with the Preferred Stock as to dividend rights or redemption rights or liquidation preferences;
- (iv) consolidate or merge with (other than a merger with a wholly-owned subsidiary of the Company or a consolidation, merger, share exchange or other business combination in which the outstanding voting stock of the Company immediately prior to such consolidation, merger, share exchange or business combination constitutes a majority of the voting stock of the surviving entity) or into, or sell or license all or substantially all the assets of the Company to, any other person or entity, liquidate, dissolve, or wind-up the affairs of the Company, recapitalize the outstanding capital stock of the Company, or reorganize the affairs of the Company;
- (v) increase or decrease (other than by redemption or conversion) the total number of authorized shares of Preferred Stock; or
- (vi) effect an exchange, reclassification or cancellation of all or part of the shares of Preferred Stock or Common Stock, or effect an exchange, or create a right of exchange, of all or part of the shares of another class or series into the shares of Preferred Stock or Common Stock, whether in securities of the Company or another corporation.
- (b) Voting by Series of Preferred Stock. The Company shall not amend its Articles of Incorporation or Bylaws without the approval of the holders of a majority of the outstanding shares of Preferred Stock if such amendment would:
 - (i) reduce the dividend rates on the Preferred Stock provided for herein, make such dividends noncumulative, defer the date from which dividends will accrue, cancel accrued and unpaid dividends, or change the relative seniority rights of the holders of the Preferred Stock as to the payment of dividends in relation to the holders of any other capital stock of the Company;
 - (ii) reduce the amount payable to the holders of the Preferred Stock upon the voluntary or involuntary liquidation, dissolution or winding up of the Company, or change the relative seniority of the liquidation preferences of the holders of the Preferred Stock;
 - (iii) reduce the Redemption Price specified in Section 7 hereof with respect to such series;
 - (iv) delay any of the Redemption Dates provided

for in Section 7 hereof;

- (v) cancel or modify the conversion rights of the Preferred Stock provided for in Section 5 hereof; or
- (vi) otherwise amend its Articles of Incorporation if such amendment would change adversely any of the rights, preferences or privileges provided for herein for the benefit of any shares of Preferred Stock.

Redemption.

- (a) Preferred Stock Right of Redemption; Automatic Conversion. The Company shall redeem, from any source of funds legally available therefor, the Preferred Stock of each holder thereof in three (3) annual installments beginning on the fifth (5th) anniversary of the Original Issue Date (each a "Redemption Date"), unless such holder has elected to waive its right of redemption as provided herein. The Company shall effect this redemption by paying in cash to each such holder for each share of Preferred Stock a sum equal to One Hundred Dollars (\$100.00) per share (as adjusted for any stock dividends, combinations, or splits with respect to such shares), plus an amount equal to all accumulated but unpaid dividends for the shares to be redeemed (the "Redemption Price"). A holder of Preferred Stock may elect, by written notice delivered to the Company not less than twenty-one (21) days prior to the Redemption Date, to waive its right to have redeemed all (but not less than all) of the shares of Preferred Stock held by such holder which are eligible to be redeemed on such Redemption Date, provided that on such Redemption Date each such share of Preferred Stock which is not redeemed shall be converted automatically into shares of Common Stock at the Conversion Price then in effect on such Redemption Date. The number of shares of Preferred Stock that the Company shall be required under this Section 7(a) to redeem on each Redemption Date shall be 8,333 shares, except that the Company shall be required to redeem all the shares of Preferred Stock outstanding on the seventh (7th) anniversary of the Original Issue Date. Any redemption shall be made on a pro rata basis among the holders of the Preferred Stock in proportion to the shares of such series of Preferred Stock then held by them.
- (b) Redemption at the Option of the Company. The Preferred Stock may not be repurchased by the Company at the option of the Company at any time prior to the second anniversary of the Original Issue date. Notwithstanding anything herein to the contrary, on and after the second anniversary of the Original Issue Date, the Preferred Stock shall be subject to redemption, at the option of the Company, in whole or in part, at any time or from time to time (a "Called Redemption Date"), provided that the average bid price for the Common Stock has been greater than \$9.50 per share during the twenty (20) business days prior to the date of the Redemption Notice (as defined below). The procedure for the redemption or repurchase of the Preferred Stock by the Company pursuant to the provisions of this Section 7(b) shall be as set forth in Section 7(c) below.
- (c) Procedures for Redemption of Preferred Stock. At least thirty (30) days but not more than forty-five (45) days prior to each Redemption Date the Company shall mail a written notice, first class postage prepaid, to each holder of record at the close of business on the business day preceding the day on which notice is given, of the Preferred Stock to be redeemed, at the address last shown on the records of the Company for such holder, notifying such holder of the redemption to be effected, specifying (i) the number of shares to be redeemed from such holder, (ii) the Redemption Date, (iii) the Redemption Price, (iv) the place at which payment may be obtained, (v) advising

(but not less than all) such shares redeemed and that, if such election is made, such shares of Preferred Stock which are not redeemed shall be converted automatically into shares of Common Stock at the Conversion Price then in effect (setting forth such Conversion Price), and (vi) calling upon such holder to surrender to the Company, in the manner and at the place designated, its certificate or certificates representing the shares to be redeemed (the "Redemption Notice"). On or after the Redemption Date, each holder of Preferred Stock to be redeemed shall surrender to the Company the certificate or certificates representing such shares, in the manner and at the place designated in the Redemption Notice, and thereupon the Redemption Price of such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof and each surrendered certificate shall be canceled. In the event less than all the shares represented by any such certificate are redeemed, a new certificate shall be issued representing the unredeemed shares. From and after each Redemption Date, unless there shall have been a default in payment of the Redemption Price, any shares of Preferred Stock redeemed on such Redemption Date shall not be entitled to any further rights as Preferred Stock and shall not be deemed outstanding for any purpose. If the funds of the Company legally available for redemption of shares of Preferred Stock on any Redemption Date are insufficient to redeem the total number of shares of Preferred Stock to be redeemed on such date, those funds which are legally available will be used to redeem the maximum possible number of such shares ratably among the holders of such shares to be redeemed based upon the number of shares of Preferred Stock held by each such holder. The shares of Preferred Stock not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein. At any time thereafter when additional funds of the Company are legally available for the redemption of shares of Preferred Stock such funds will be used immediately to redeem the balance of the shares which the Company has become obliged to redeem on any Redemption Date, but which it has not redeemed, it being understood that any such redemption shall not constitute a waiver by a holder of Preferred Stock of any rights derived from the failure to redeem on the Redemption Date.

such holder of its right to elect to waive its right to have all

No Reissuance of Convertible Preferred Stock. No share(s) of Preferred Stock acquired by the Company by reason of redemption, purchase, conversion, or otherwise shall be reissued, and all such shares shall be canceled, retired, and eliminated from the shares that the Company shall be authorized to issue. The Company from time to time may take such appropriate corporate action as may be necessary to reduce the authorized number of shares of the Preferred Stock accordingly.

No Dilution or Impairment. The Company will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, share exchange, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Preferred Stock set forth herein, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holders of the Preferred Stock against dilution or other impairment.

Notices of Record Date. In the event of any:

(a) taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other

distribution, or any right to subscribe for, purchase, or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right; or

- (b) capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company, any merger, consolidation, or share exchange of the Company, or any transfer of all or substantially all the assets of the Company to any other corporation, or any other entity or person; or
- (c) voluntary or involuntary dissolution, liquidation, or winding up the Company;

then and in each such event the Company shall mail or cause to be mailed to each holder of Preferred Stock a notice specifying (i) the record date for such dividend, distribution, or right and a description of such dividend, distribution, or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, share exchange, dissolution, liquidation, or winding up is expected to become effective, and (iii) the time, if any, that is to be fixed as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, recapitalization, transfer, consolidation, merger, share exchange, dissolution, liquidation, or winding up. Such notice shall be mailed at least ten (10) days prior to the date specified in such notice on which such action is to be taken.

THIS DEBENTURE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR ANY APPLICABLE STATE SECURITIES LAW AND MAY NOT BE TRANSFERRED UNLESS (i) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR SUCH APPLICABLE STATE SECURITIES LAWS, OR (ii) IN THE OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY REGISTRATION UNDER THE SECURITIES ACT OR SUCH APPLICABLE STATE SECURITIES LAWS IS NOT REQUIRED IN CONNECTION WITH SUCH TRANSFER.

THE INDEBTEDNESS EVIDENCED BY THIS DEBENTURE IS SUBORDINATED TO THE PRIOR PAYMENT IN FULL OF THE BANK DEBT (AS DEFINED IN THE SUBORDINATION AGREEMENT REFERRED TO BELOW) PURSUANT TO, AND TO THE EXTENT PROVIDED IN, THAT CERTAIN SUBORDINATION AGREEMENT DATED MARCH 27, 1997, AMONG ENVIRONMENTAL TECTONICS CORPORATION, SIRROM CAPITAL CORPORATION, AND FIRST UNION NATIONAL BANK.

Environmental Tectonics Corporation

12% Subordinated Debenture Due March 27, 2004

No. R-1 \$4,000,000.00 March 27, 1997

For value received, Environmental Tectonics Corporation, a Pennsylvania corporation (the "Company"), hereby promises to pay to Sirrom Capital Corporation at Tandem Capital, Inc., 500 Church Street, Suite 200, Nashville, Tennessee 37219, or registered assigns, on the 27th day of March, 2004, the principal amount of \$4,000,000.00 and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on the principal amount from time to time remaining unpaid hereon at the rate of 12% per annum from the date hereof until maturity, payable quarterly on the first day of each February, May, August, and November in each year commencing May 1, 1997, and at maturity. The Company agrees to pay interest (computed on the same basis) on overdue principal and premium, if any, and (to the extent legally enforceable) on any overdue installment of interest, at the rate of 13% per annum (or, in each case, at the highest rate permitted by applicable law, whichever is less) until paid.

Both the principal hereof and interest hereon are payable to the order of the holder hereof at its address registered on the books of the Company or by federal funds wire transfer to a bank account designated in writing by the holder to the Company in coin or currency of the United States of America which at the time of payment shall be legal tender for the payment of public and private debts. If any amount of principal, premium, if any, or interest on or in respect of this Debenture becomes due and payable on any date which is not a Business Day, such amount shall be payable on the next preceding Business Day. "Business Day" means any day other than a Saturday, Sunday, statutory holiday or other day on which banks in Tennessee are required by law to close or are customarily closed.

This Debenture is one of the 12% Subordinated Debentures due March 27, 2004 of the Company in the aggregate principal amount of \$4,000,000.00 issued under and pursuant to the terms and provisions of the Debenture Purchase Agreement, dated as of March 27, 1997 (the "Debenture Agreement"), entered into by the Company with the original purchaser referred to therein, and this Debenture and the holder hereof are entitled, equally and ratably with the holders of all other Debentures

outstanding under the Debenture Agreement, to all the benefits and security provided for thereby or referred to therein, and to which Debenture Agreement reference is hereby made for all such terms and provisions.

This Debenture is subordinated to certain other indebtedness of the Company to the extent and with the effect set forth in the Subordination Agreement between the Company, First Union National Bank, and Sirrom Capital Corporation dated as of March 27, 1997.

If an Event of Default, as defined in the Debenture Agreement, occurs and is continuing, the principal of this Debenture and the other Debentures outstanding under the Debenture Agreement may be declared due and payable in the manner and with the effect provided in the Debenture Agreement.

This Debenture is registered on the books of the Company and is transferable only by surrender thereof at the principal office of the Company at 125 James Way, Southampton, Pennsylvania 18966-3877, or such other address as the Company shall have advised the holders of the Debenture in writing, duly endorsed or accompanied by a written instrument of transfer duly executed by the registered holder of this Debenture or its attorney duly authorized in writing. Payment of or on account of principal, premium, if any, and interest on this Debenture shall be made only to or upon the order in writing of the registered holder.

If the indebtedness represented by this Debenture or any part thereof is placed in the hands of attorneys for collection after an Event of Default, or the enforcement of any rights under the Debenture Agreement, the Company agrees to pay the principal, premium if any, and interest due and payable hereon, and an amount equal to all costs of collecting this Debenture, including reasonable attorneys' fees and expenses.

 $\hbox{ This Debenture and the Debenture Agreement are governed} \\ \text{by and construed in accordance with the laws of the State of} \\ \\ \hbox{ Tennessee}$

[Corporate Seal]

ENVIRONMENTAL TECTONICS CORPORATION

By/s/ Duane Deaner

Duane Deaner, Chief
Financial Officer

ATTEST:/s/ Richard E. McAdams

Secretary

REVOLVING CREDIT AGREEMENT

between

FIRST UNION NATIONAL BANK

and

ENVIRONMENTAL TECTONICS CORPORATION

Dated as of March 27, 1997

REVOLVING CREDIT AGREEMENT BETWEEN FIRST UNION NATIONAL BANK and ENVIRONMENTAL TECTONICS CORPORATION

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REVOLVING CREDIT AGREEMENT

THIS REVOLVING CREDIT AGREEMENT ("Agreement"), dated as of March 27, 1997, is between FIRST UNION NATIONAL BANK, a national banking association (the "Bank"), and ENVIRONMENTAL TECTONICS CORPORATION, a Pennsylvania corporation (the "Borrower").

BACKGROUND

The Bank and the Borrower desire to set forth the terms and conditions under which the Bank will make available to the Borrower certain credit facilities to be used for the purposes specified in this Agreement. Accordingly, the Bank and the Borrower, each intending to be legally bound hereby, agree as follows:

ARTICLE I - DEFINITIONS

Terms used herein without definition that are defined in the Uniform Commercial Code shall have the meanings ascribed to them therein, unless the context requires otherwise. The following terms shall have the following meanings in this Agreement:

"Account" shall have the meaning given to that term in the Uniform Commercial Code and, in addition, shall include any right to payment for goods sold or leased or services rendered which is evidenced by an instrument or chattel paper.

"Adjusted Base Rate" shall mean the rate of interest equal to the Base Rate less the Rate Reduction, if any.

"Adjusted Base Rate Loan" shall mean any Line of Credit Loan accruing interest at the Adjusted Base Rate.

"Adjusted LIBO Rate" shall mean the interest rate equal to the sum of LIBOR plus two and one-half percent (2.50%) less the Rate Reduction, if any.

"Adjusted LIBO Rate Loan" shall mean any Line of Credit Loan accruing interest at the Adjusted LIBO Rate.

"Affiliate" shall mean any Subsidiary of the Borrower and any Person or entity that, now or hereafter, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common ownership or control with the Borrower. For purposes of this definition, the terms "control," "controls" and "controlled" shall refer to the power to determine the management or policies of a Person, whether resulting from an official position or capacity with such Person, direct or indirect beneficial ownership of at least twenty percent (20%) of the voting securities or other equity interests of such Person, or otherwise.

"Agreement" shall mean this agreement, together with all exhibits, amendments, modifications and supplements hereto as may be in effect from time to time.

"Applicable Law" shall mean all applicable provisions of (i) constitutions, statutes, rules, regulations and orders of governmental authorities of any kind having jurisdiction over the Bank or the Borrowers, (ii) authorizations, consents, approvals, and licenses of such governmental authorities, (iii) Judgments, and (iv) common law and equity.

"Applicable Rates" shall have the meaning given such term in Section 2.2 hereof.

"Assignment of Claims" shall mean that assignment by the Borrower to the Bank, dated the date of this Agreement, in form and substance satisfactory to the Bank, of claims of the Borrower upon the United States, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Bank" shall have the meaning specified in the initial paragraph of this Agreement, together with its successors and assigns.

"Base Rate" shall mean the floating annual rate of interest that is designated from time to time by the Bank as the "Base Rate" and is used by the Bank as a reference base with respect to interest rates charged to borrowers. The determination and statement of the Base Rate shall not in any way preclude the Bank from making loans to other borrowers at rates which are higher or lower than the Base Rate.

"Borrower" shall have the meaning specified in the initial paragraph of this Agreement, together with its successors and assigns.

"Business Day" shall mean any day upon which the Bank is open for business at 123 South Broad Street, Philadelphia, Pennsylvania.

"Capital Lease" shall mean any lease of property which, in accordance with GAAP, should be capitalized on the lessee's balance sheet.

"Capital Lease Obligation" shall mean the amount of the liability which, according to GAAP, should be capitalized or disclosed with respect to a Capital Lease.

"Chase Letters of Credit" shall have the meaning given to such term in Section $7.2\ \mathrm{hereof}$.

"Closing" shall mean the execution and delivery to the Bank of all of the documents and instruments required by the terms of this Agreement and the closing of the transactions contemplated by this Agreement.

"Closing Date" shall mean the date on which the Closing takes place. $\label{eq:closing}$

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Collateral" shall have the meaning set forth in the Security Agreement. $\,$

"Copyright Assignment" shall mean the collateral assignment by the Borrower to the Bank, dated the same date as this Agreement, in form and substance satisfactory to the Bank, of certain copyrights held by the Borrower, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Default Rate" shall mean the Base Rate plus two percent (2%) .

"Encumbrance" shall mean, as to any Person, any mortgage, lien, pledge, adverse claim, charge, security interest or other encumbrance in or on, or any interest or title of any vendor,

lessor, lender to, or other secured party of the Person under any conditional sale or other title retention agreement or Capital Lease with respect to, any property or asset of the Person.

"Environmental Laws" shall mean the Federal Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Sections 9601, et. seq., the Federal Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901 et. seq., the Hazardous Materials Transportation Act, 49 U.S.C. Sections 1801, et. seq., all other federal, state and local environmental or health laws applicable to the Borrower or its business, operations or assets now or hereafter enacted, and all rules, regulations, orders and publications adopted or promulgated pursuant thereto from time to time.

"ERISA" shall mean the federal Employee Retirement Income Security Act of 1974, as amended.

"Eurodollar Business Day" shall mean any day on which relevant London international financial markets are open for dealings in deposits of U.S. Dollars and which is also other than a Saturday, Sunday or other day on which commercial banks are authorized or permitted to close in Philadelphia, Pennsylvania.

"Event of Default" shall have the meaning set forth in Article VIII of this Agreement.

"Federal Reserve Board" shall mean the Board of Governors of the United States Federal Reserve System.

"Financial Statements" shall have the meaning set forth in Section $4.4\,(a)$ of this Agreement.

"GAAP" shall mean generally accepted accounting principles, as in effect at the time of application to the provisions hereof, and consistently applied.

"Guarantors" shall mean Environmental Tectonics Corporation (Europe) Limited and ETC International Corporation.

"Guarantor Security Agreements" shall mean that certain Security Agreement, dated as of the same date of this Agreement, by ETC International Corporation and that certain Debenture dated as of the same date of this Agreement, by Environmental Tectonics Corporation (Europe) Limited, each in form and substance satisfactory to the Bank, as required by Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Guaranty" shall mean any guaranty or agreement to be a surety or other material contingent liability (other than any endorsement for collection or deposit in the ordinary course of business), direct or indirect, with respect to any obligation of another Person.

"Guaranty Agreements" shall mean those certain Guaranties, dated the same date of this Agreement, in form and substance satisfactory to the Bank, by the Guarantors, as required by Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Hazardous Materials" shall mean all materials of any kind which are flammable, explosive, toxic, radioactive or otherwise hazardous to animal or plant life or the environment, including, without limitation, "hazardous wastes," "hazardous substances" and "contaminants," as such terms are defined by Environmental Laws.

"Indebtedness" shall mean any obligation for borrowed money, including, without limitation:

- (a) any obligation owed for all or any part of the purchase price of property or other assets or for the cost of property or other assets constructed or of improvements thereto, other than accounts payable included in current liabilities and incurred in respect of property purchased in the ordinary course of business;
 - (b) any Capital Lease Obligation; and
- (c) any reimbursement obligations and other obligations under any letter of credit, currency swap agreement, interest rate swap, cap, collar or floor agreement or other interest rate management devise, or any forward sale or purchase agreement for foreign currencies.

"Interest Period" shall mean, with respect to any Adjusted LIBO Rate Loan, a period of 30, 60 or 90 days' duration as the Borrower may elect; provided, however, that (a) interest shall accrue from and including the first day of each Interest Period to, but excluding, the day on which such Interest Period expires; (b) any Interest Period which would otherwise end on a day which is not a Eurodollar Business Day shall be extended to the next succeeding Eurodollar Business Day, unless such Eurodollar Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Eurodollar Business Day; and (c) with respect to any Interest Period which begins on the last Eurodollar Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) the Interest Period shall end on the last Eurodollar Business Day of a calendar month.

"Judgment" shall have the meaning set forth in Section 8.6 of this Agreement.

"Landlord's Waivers" shall mean landlord's waivers, in form and substance satisfactory to the Bank, by Orlando TechCenter, Ltd. as landlords of real property leased to the Borrower, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Letters of Credit" shall have the meaning set forth in Section 2.1(b)(1) of this Agreement.

"Letter of Credit Fee Reduction" shall mean a reduction in the letter of credit fee otherwise charged by the Bank to the Borrower pursuant to Section 2.1(b)(2) of this Agreement. The Letter of Credit Fee Reduction shall equal one-quarter of one percent (0.25%) if the Borrower's Leverage Ratio is greater than 0.75 and less than 1.00. The Letter of Credit Fee Reduction shall equal sixty-five one hundredths of one percent (0.65%) if the Borrower's Leverage Ratio is less than or equal to 0.75.

"LIBOR" shall mean the rate per annum (rounded upwards, if necessary, to the nearest 1/100 of 1%) determined by the Bank pursuant to the following formula:

For purposes of this Agreement, the term "London InterBank Offered Rate" shall mean, for any Interest Period, as applied to any Adjusted LIBO Rate Loan, the rate per annum reported on

Telerate page 3750 as of 11:00 a.m. London time (or as soon thereafter as practicable) two Eurodollar Business Days prior to the first day of such Interest Period or, if not so reported, then as determined by the Bank from another recognized source of interbank quotation.

"Line of Credit" shall mean the line of credit from the Bank to the Borrower established pursuant to Section $2.1\ \mathrm{of}$ this Agreement.

"Line of Credit Loans" shall mean the loans made by the Bank to the Borrower pursuant to the Line of Credit.

"Line of Credit Note" shall have the meaning set forth in Section 2.1 of this Agreement, together with all replacements, amendments and renewals thereof.

"Loan Documents" shall mean this Agreement, the Security Agreement, the Mortgage, the Note, the Patent Assignment, the Trademark Assignment, the Copyright Assignment, the Guaranty Agreements, the Guarantor Security Agreements, the Assignment of Claims and all agreements, amendments, certificates, financing statements, schedules, reports, notices, and exhibits now or hereafter executed or delivered in connection with any of the foregoing, as may be in effect from time to time.

"Loans" shall mean the Line of Credit Loans.

"Mortgage" shall mean a mortgage, dated the same day as this Agreement, in form and substance satisfactory to the Bank, by which the Borrower shall grant to the Bank a mortgage lien on real property located at County Line Industrial Park, Southampton, Pennsylvania, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Note" shall mean the Line of Credit Note, and all replacements, amendments, extensions and renewals thereof.

"Obligations" shall mean the obligations of the Borrower:

- (a) to pay the principal, interest, commitment fees and any other liabilities of the Borrower to the Bank under this Agreement and the other Loan Documents in accordance with the terms thereof;
- (b) to satisfy all of the other direct or indirect liabilities of the Borrower to the Bank, whether hereunder or otherwise, whether now existing or hereafter incurred, whether or not evidenced by any note or other instrument, matured or unmatured, direct, absolute or contingent, joint or several, including any extensions, modifications, renewals thereof and substitutions therefor;
- (c) to repay the Bank all amounts advanced by the Bank hereunder or otherwise on behalf of the Borrower, including, but without limitation, advances for principal or interest payments to prior secured parties, mortgagors or lienors, or for taxes, levies, insurance, rent, wages, repairs to or maintenance or storage of any Collateral; and
- (d) to reimburse the Bank, on demand, for all of the Bank's expenses and costs, including the reasonable fees and expenses of its counsel, in connection with the negotiation, preparation, administration, amendment, modification, or enforcement of this Agreement and the documents required hereunder, including all amounts payable under Section 10.3

hereof.

"Patent Assignment" shall mean the collateral assignment by the Borrower to the Bank, dated the same date as this Agreement, in form and substance satisfactory to the Bank, of certain patents held by the Borrower, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"PBGC" shall mean the Pension Benefit Guaranty Corporation.

"Person" shall mean any individual, corporation, partnership, association, joint-stock company, trust, unincorporated organization, joint venture, court or governmental or political subdivision or agency thereof.

"Rate Reduction" shall mean a reduction in the Applicable Base Rate or Applicable LIBO Rate, as applicable, charged by the Bank to the Borrower pursuant to Section 2.2 of this Agreement. The Rate Reduction shall equal one-quarter of one percent (0.25%) if the Borrower's Leverage Ratio is greater than 0.75 and less than 1.00. The Rate Reduction shall equal one half of one percent (0.50%) if the Borrower's Leverage Ratio is less than or equal to 0.75. The determination of whether the Borrower is entitled to a Rate Reduction shall be made in connection with the Borrower's delivery of the certificate required to be delivered by the Borrower to the Bank pursuant to Section 6.2(b) of this Agreement. Rate Reductions will become effective on the first day of the subsequent fiscal quarter. Prior to the Borrower's delivery of the first such Certificate, no Rate Reduction will be available.

"Regulatory Change" means (a) the enactment or effectuation after the date of this Agreement of any new, or change in any existing, Applicable Law, (b) the adoption after such date of any new, or the adoption or other effectuation after such date of any change in any existing, interpretation, directive or request (whether or not having the force of law), or (c) any change after such date in the administration or enforcement of any Applicable Law to which the Bank is subject. As used in this definition, the "effectuation" of a change shall include, without limitation, that consisting of or resulting from a determination of a court or regulatory authority.

"Reserve Percentage" shall mean, for any Adjusted LIBO Rate Loan for any Interest Period therefor, the maximum percentage reserve requirement (rounded to the next highest 1/100 of 1% and expressed as a decimal) in effect for any day during the Interest Period under the Federal Reserve Board's Regulation D for Eurocurrency Liabilities as defined therein.

"Revolving Facility Commitment" shall have the meaning set forth in Section 2.1 of this Agreement.

"Security Agreement" shall mean the agreement between the Borrower as debtor and the Bank as secured party, dated the same date as this Agreement, in form and substance satisfactory to the Bank, by which the Borrower shall grant security interests in certain of its assets to the Bank, as required pursuant to Article III hereof, together with all amendments, modifications, exhibits, and schedules thereto as may be in effect from time to time.

"Subordinated Debt" shall mean debt incurred by the Borrower pursuant to: (i) that certain Debenture Purchase Agreement dated March 27, 1997 by Sirrom Capital Corporation and Borrower; (ii) that certain Stock Purchase Warrant dated March 27, 1997 by

Sirrom Capital Corporation and Borrower; and (iii) that certain Preferred Stock Purchase Agreement by Sirrom Capital Corporation and Borrower.

"Subordination Agreements" shall mean: (i) that certain subordination agreement by and among the Bank, the Borrower and Sirrom Capital Corporation, dated the same date of this Agreement, in form and substance satisfactory to the Bank; (ii) that certain Dividend Subordination Agreement by and between the Bank, the Borrower and Sirrom Capital Corporation, dated the same date of this Agreement, in form and substance satisfactory to the Bank; and (iii) that certain subordination agreement by and among the Bank, the Borrower, William F. Mitchell, Pete F. Stephens and Pete F. Stephens Profit Sharing Plan, dated the same date of this Agreement, in form and substance satisfactory to the Bank as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Subsidiary" shall mean, as to any designated corporation, any corporation, the outstanding shares of which having sufficient voting power (not depending on the happening of a contingency) to elect at least a majority of the members of its board of directors, are at the time owned by the designated corporation.

"Tax" means any federal, state or foreign tax, assessment or other governmental levy or duty or other charge (including any withholding tax) upon a person or entity or upon its assets, revenues, income or profits, other than income and franchise taxes imposed upon the Bank by the jurisdictions (or any political subdivision thereof) in which the Bank or any office of the Bank is located.

"Termination Date" shall initially mean May 31, 1999. The Bank may, in its sole discretion, extend the Termination Date for one or more additional one year periods by providing written notice to the Borrower on or before the Termination Date.

"Trademark Assignment" shall mean the collateral assignment by the Borrower to the Bank, dated the same date as this Agreement, in form and substance satisfactory to the Bank, of certain trademarks and other intangible property held by the Borrower, as required pursuant to Article III of this Agreement, together with all amendments, modifications, exhibits and schedules thereto as may be in effect from time to time.

"Uniform Commercial Code" shall mean the Uniform Commercial Code of Pennsylvania as codified at 13 Pa. C.S.A. Section 101 et seq., as in effect on the date of this Agreement.

ARTICLE II - CREDIT ACCOMMODATIONS

- 2.1 The Line of Credit. The Bank shall make available to the Borrower, commencing on the Closing Date, a Revolving Credit Facility in the maximum principal amount of \$10,000,000.00 (the "Revolving Facility Commitment"), upon the terms and conditions set forth herein. After May 31, 1998, the Revolving Facility Commitment shall be reduced to \$9,000,000.
- (a) Generally. At any time and from time to time during the period commencing on the Closing Date and ending on the Termination Date, upon the request of the Borrower, the Bank shall provide to the Borrower a loan or loans which shall be used by the Borrower for working capital and/or repayment of indebtedness existing at the time of the Closing (the "Line of Credit"). Subject to Section 2.2(b)(2), any loan request by the Borrower shall be in a minimum amount of \$100,000.00. To the

extent a loan request exceeds \$100,000.00, such excess shall be in multiples of \$100,000.00. The Borrower may use the Line of Credit during the period referred to in the preceding sentence by borrowing, repaying and reborrowing in accordance with the terms of this Agreement. On and before May 31, 1998, the aggregate outstanding principal under the Line of Credit at any time shall not exceed \$9,000.000.00. After May 31, 1998, the aggregate outstanding principal under the Line of Credit at any time shall not exceed \$8,000,000. If, at any time, the aggregate outstanding principal under the Line of Credit exceeds: (i) on or before May 31, 1998, \$9,000,000.00 or (ii) after May 31, 1998, \$8,000,000.00, then, without any requirement of demand or notice from the Bank, the Borrower shall immediately pay to the Bank the amount of such excess. Upon the Termination Date, unless the same has been extended by written agreement between the Bank and the Borrower (which the Bank shall provide, if at all, no later than forty-five (45) days prior to the Termination Date), the Bank's commitment to make Line of Credit Loans shall terminate, all Line of Credit Loans shall immediately mature and all Obligations under the Revolving Credit Facility shall be immediately due and payable in full.

(b) Letters of Credit.

- (1) Generally. In addition to making loans to the Borrower under the Line of Credit as provided in Section 2.1(a) hereof, the Bank shall, upon the request of the Borrower and subject to the terms of this Agreement, also issue one or more standby letters of credit ("Letters of Credit") for the account of the Borrower to benefit customers of the Borrower that have advanced funds to the Borrower or have executed maintenance contracts with the Borrower. The cumulative face amount of all outstanding Letters of Credit, together with the Chase Letters of Credit, shall at no time exceed \$2,000,000.00. All amounts drawn under Letters of Credit shall be deemed to be evidenced by the Line of Credit Note, and the amount available to be borrowed under the Revolving Credit Facility shall be reduced by the aggregate amounts drawn and available to be drawn at any time under all outstanding Letters of Credit. In no event shall the aggregate amount available to be drawn on all outstanding Letters of Credit plus the Chase Letters of Credit plus the outstanding principal balance of Line of Credit Loans exceed the Revolving Facility Commitment. In such an event, the Borrower shall immediately pay to the Bank the amount of such excess. The duration of any Letters of Credit shall not extend beyond the Termination Date without the prior written consent of the Bank. Upon an Event of Default under this Agreement, the Bank may, at its option, cause to be advanced Adjusted Base Rate Loans from the Revolving Credit Facility in an amount up to the face amount of the Letters of Credit. The proceeds of any advance made pursuant to this paragraph shall be deposited with the Bank in a deposit account maintained at the Bank which shall constitute a portion of the Collateral. In the event that any outstanding Letters of Credit are thereafter returned to the Bank without any drafts or demands for payment having been made thereon, then from any sums then on deposit in the foregoing account an amount shall be applied to the then outstanding principal balance of the Revolving Credit Facility which is equal to the face amount of each such returned Letter of Credit.
- (2) Issuance of Letters of Credit. Subject to the provisions of Section 2.1(b)(1), the Bank shall issue Letters of Credit for the account of the Borrower, provided that the Borrower (i) provides a written request for each such Letter of Credit specifying the terms thereof, including, without limitation, the amount and the name and address of the beneficiary of such Letter of Credit; (ii) executes and delivers to the Bank an application for each such Letter of Credit

pursuant to the form provided for such purpose by the Bank; and (iii) executes and delivers to the Bank such other documents and instruments which the Bank, in its sole and absolute discretion, deems reasonable and necessary. The Borrower shall pay to the Bank on the date of issuance of each Letter of Credit hereunder a fee equal to the face amount of the Letter of Credit multiplied by 1.5% less the Letter of Credit Fee Reduction, if any. The foregoing fees may be deducted by the Bank from the Borrower's accounts maintained at the Bank as such fees are incurred. The determination of whether the Borrower is entitled to a Letter of Credit Fee Reduction shall be made in connection with the Borrower's delivery of the certificate required to be delivered by the Borrower to the Bank pursuant to Section 6.2 of this Agreement. Letter of Credit Fee Reductions for future Letters of Credit will become effective upon the first Business Day of the fiscal quarter following the Bank's receipt of the abovedescribed certificate.

- (c) Interest. Interest shall accrue on all loans outstanding under the Line of Credit at the rate or rates set forth in Section 2.2 hereof.
- (d) Line of Credit Note. The obligations of the Borrower to repay the aggregate outstanding principal under the Revolving Credit Facility and to pay accrued interest on Line of Credit Loans shall be evidenced by a promissory note, in form and substance satisfactory to the Bank, to be executed and delivered to the Bank concurrently with the execution and delivery of this Agreement (the "Line of Credit Note").
- (e) Commitment Fees. In addition to any and all other fees required to be paid by the Borrower in accordance with the terms of this Agreement, the Borrower shall pay to the Bank on the first Business Day of each of Borrower's fiscal quarters a commitment fee equal to 0.05% of the average unused balance of the Revolving Facility Commitment during the preceding fiscal quarter.
- $2.2\,$ Interest. Interest shall accrue on the outstanding principal amounts of the Line of Credit Loans in accordance with the following provisions:
- (a) Applicable Rates. At the Borrower's election, the Line of Credit Loans shall bear interest at any one of the following rates (the "Applicable Rates"):
- (1) the Adjusted Base Rate, such rate to change simultaneously and automatically upon the Bank's designation of any change in the Base Rate; or
 - (2) the Adjusted LIBO Rate.
- (b) Determination of Interest Periods and Applicable Rates. Interest Periods and the Applicable Rates shall be chosen with respect to Line of Credit Loans as follows:
- (1) The Borrower may ask the Bank for indications of LIBOR for specified Line of Credit Loans and Interest Periods, as applicable, at any time. If the Borrower anticipates that it may elect the Adjusted LIBO Rate to be applicable to a Line of Credit Loan, the Borrower shall request an indication of LIBOR prior to 11:00 a.m. (Philadelphia time) at least three Eurodollar Business Days prior to the commencement of the applicable Interest Period, and if the Borrower desires to elect the Adjusted LIBO Rate for such Interest Period, the Borrower must accept such indication of LIBOR by notice to the Bank in writing or by telephone (confirmed promptly in writing) prior to 11:00 a.m. (Philadelphia time) on the date of acceptance, which

shall be at least two Eurodollar Business Days prior to the commencement of the Interest Period selected by the Borrower. If the Borrower does not provide the applicable notice of election of the Adjusted LIBO Rate, then the Borrower shall be deemed to have requested that the Adjusted Base Rate apply to any Line of Credit Loan which is subject to any expiring Interest Period and to any new Line of Credit Loan, as the case may be, until the Borrower shall have given appropriate notice of a requested change in or determination of the rate of interest in accordance with this Section 2.2. No acceptance of an indication of rate hereunder shall bind the Bank unless timely made.

- (2) The Borrower shall not request and the Bank shall not be required to provide, an indication of LIBOR with respect to a specified Interest Period for any Line of Credit Loan of less than \$500,000.
- (3) All determinations and quotations of rate by the Bank hereunder shall be conclusive and binding upon the Borrower, in the absence of manifest error.
- (4) If no Interest Period is elected with respect to any Adjusted LIBO Rate Loan, the request for such Line of Credit Loan shall be deemed to be a request for a thirty day Interest Period in respect of any such Adjusted LIBO Rate Loan.
- (5) Upon the occurrence of any Event of Default and a resulting acceleration of Obligations pursuant to Section 9.1(b) hereof, all Interest Periods shall automatically terminate and all Adjusted LIBO Rate Loans shall be automatically converted to Loans bearing interest at the Default Rate and shall be subject to the payment of all amounts then due with respect to such termination under Section 2.4 hereof.
- (c) Payment of Interest. Notwithstanding anything to the contrary in this Agreement, the Borrower shall pay interest accruing at the Adjusted LIBO Rate monthly in arrears on the first Business Day of each consecutive calendar month during an Interest Period commencing on the first such date next succeeding the date on which such Interest Period commenced, and on the expiration date of such Interest Period. The Borrower shall pay interest on all Line of Credit Loans other than Adjusted LIBO Rate Loans monthly in arrears on the first day of each consecutive calendar month commencing with the month immediately following the date on which the first advance under the Line of Credit is made. All accrued but unpaid interest under the Note shall be payable, without demand, on the maturity thereof (whether by its stated terms, or upon prepayment, acceleration or otherwise).
- (d) Default Rate. Notwithstanding anything to the contrary contained in this Section 2.2, upon the occurrence of an Event of Default under this Agreement, all Line of Credit Loans shall bear interest at the Default Rate.
- 2.3 Conversion and Continuation of Loans. The Borrower may convert any Line of Credit Loan to an Adjusted LIBO Rate Loan or continue any Adjusted LIBO Rate Loan subject to an expiring Interest Period for an additional Interest Period upon the same advance notice required pursuant to Section 2.2 hereof, subject, however, to the all of the terms of this Agreement, including, without limitation, the following:
- (a) Rate Availability. An Adjusted LIBO Rate shall be available, notwithstanding Section $2.4\,\mathrm{(a)}$ hereof.
- (b) Limitation on Interest Period. No Interest Period may be elected with respect to any Line of Credit Loan (i) which

would expire after the Termination Date in the case of an Adjusted LIBO Rate Loan, or (ii) for a period other than those referred to in the definition of "Interest Period" set forth in Article I hereof.

- (c) Payment of Interest; No Default. All interest accrued under an expiring Interest Period shall be paid by the Borrower on the last day of such Interest Period, and no continuation or conversion of a Line of Credit Loan subject to an expiring Interest Period shall be made for so long as an Event of Default shall be continuing.
- (d) Timing. No continuation or conversion of an Adjusted LIBO Rate Loan may be effected on other than the last day of the Interest Period then in effect with respect to such Adjusted LIBO Rate Loan, and a Line of Credit Loan which is not an Adjusted LIBO Rate Loan may be converted into an Adjusted LIBO Rate Loan only on a Eurodollar Business Day.
- (e) Failure to Give Notice. In the event that the Borrower shall not give notice to continue any Adjusted LIBO Rate Loan into a subsequent Interest Period in accordance with Section 2.2 hereof, the Borrower shall be deemed to have requested that such Adjusted LIBO Rate Loan (unless repaid) be converted to one accruing interest at the Adjusted Base Rate, at the expiration of the then current Interest Period.
- $2.4\,$ Special Provisions Applicable to Adjusted LIBO Rate Loans. The following special provisions shall apply to Adjusted LIBO Rate Loans:
- (a) Mandatory Suspension and Conversion of Adjusted LIBO Rate Loans. The Bank's obligations to make, maintain or convert into Adjusted LIBO Rate Loans of any type shall be suspended, all outstanding Adjusted LIBO Rate Loans shall be converted on the last day of their applicable Interest Periods (or, if earlier, in the case of clause (2) below, on the last day the Bank may lawfully continue to maintain Adjusted LIBO Rate Loans or, in the case of clause (3) below, the day determined by such Bank to be the last Business Day before the effective date of the applicable restriction) into, and all pending requests for the making of or conversion into Adjusted LIBO Rate Loans shall be deemed requests for, Line of Credit Loans at the Adjusted Base Rate if:
- (1) on or prior to the determination of the interest rate for an Adjusted LIBO Rate Loan for any Interest Period, the Bank determines that for any reason appropriate quotations are not available to it (including, quotations in the interbank market selected by it for deposits with it) for purposes of determining the Adjusted LIBO Rate or in the good faith reasonable judgment of the Bank, that such rate would not accurately reflect the cost to the Bank of making, maintaining or converting into an Adjusted LIBO Rate Loan of such type for such Interest Period;
- (2) at any time the Bank determines, in the exercise of its good faith reasonable judgment, that any Regulatory Change makes it unlawful or impracticable for such Bank to make or maintain any Adjusted LIBO Rate Loan, or to comply with its obligations hereunder in respect thereof; or
- (3) the Bank determines, in the exercise of its good faith reasonable judgment, that by reason of any Regulatory Change it is restricted, directly or indirectly, in the amount that it may hold of (x) a category of liabilities that include deposits by reference to which, or on the basis of which, the interest rate applicable to Adjusted LIBO Rate Loans is directly

or indirectly determined, or (y) the category of assets that includes Adjusted LIBO Rate Loans.

The Bank shall promptly give notice to the Borrower of any circumstance that would make the provisions of this Section 2.4(a) applicable, but the failure to give any such notice shall not affect such Bank's rights hereunder.

- (b) Regulatory Changes. If any Regulatory Change:
- (1) shall subject the Bank to any Tax determined by the Bank to be applicable to any Adjusted LIBO Rate Loan, to the Bank's obligation to make or maintain any such Adjusted LIBO Rate Loan, to this Agreement or the Note, or shall, in the determination of the Bank, change the basis of taxation of payments to the Bank of the principal of or interest on any Adjusted LIBO Rate Loan or of any other amounts payable under this Agreement in respect of any Adjusted LIBO Rate Loan or its obligation to make or maintain any Adjusted LIBO Rate Loan; or
- (2) shall impose, increase, modify or deem applicable any Tax, reserve, insurance charge, special deposit, assessment or other requirement or condition (other than reserves and assessments taken into account in the calculation of the Adjusted LIBO Rate) against assets of, deposits with or to the account of, credit extended by, or the obligations of the Bank under this Agreement, or shall impose on the Bank or on any relevant interbank market for U.S. Dollars, any condition; and the result of the foregoing, in the determination of the Bank, is to (x) reduce the amount of any sum received or receivable by the Bank with respect to any Adjusted LIBO Rate Loan or the return to be earned by the Bank on any such Loan, (y) impose a cost on the Bank that is attributable to the making or maintaining of, or its commitment to make, any such Adjusted LIBO Rate Loan, or (z) require the Bank to make any payment on, or calculated by reference to, the gross amount of any amount received by it hereunder or under any such Loan, then, within 15 days after request by the Bank, the Borrower shall pay to the Bank such additional amount or amounts as the Bank determines will compensate the Bank for such reduction, increased cost or payment. The Bank will promptly notify the Borrower of any Regulatory Change of which it has knowledge that will entitle the Bank to compensation pursuant to this Section 2.4(b), but the failure to give such notice shall not affect the Bank's right to such compensation. The Bank agrees to take any reasonable action which the Bank determines, in its discretion, may be available without cost or expense to the Bank in order to eliminate or mitigate the effect of such Regulatory Change.
- (c) Funding Losses. The Borrower shall pay to the Bank, upon request, such amount or amounts as the Bank determines are necessary to compensate it for any loss, cost or expense incurred by it as a result of (i) any payment, prepayment or conversion of an Adjusted LIBO Rate Loan on a date other than the last day of an Interest Period for such Adjusted LIBO Rate Loan or (ii) an Adjusted LIBO Rate Loan for any reason not being made or converted, or any payment of principal thereof or interest thereon not being made, on the date therefor determined in accordance with the applicable provisions of this Agreement. Such amount shall equal the excess of (x) the interest that would have been received from the Borrower under this Agreement on any amounts to be redeployed during an Interest Period or its remaining portion over (y) the interest component of the return that the Bank determines it could have obtained had it placed such amount on deposit in the interbank market selected by it for a period equal to such Interest Period or its remaining portion.
 - 2.5 Requirements of Law. In the event that after the date

hereof, any change in any law, regulation or treaty or in the interpretation or application thereof or compliance by the Bank with any request or directive (whether or not having the force of law) from any central bank or other governmental authority, agency or instrumentality:

- (a) subjects or shall subject the Bank to any tax of any kind whatsoever with respect to this Agreement, the loans made hereunder or the issuance or maintenance of the Letters of Credit hereunder, or changes the basis of taxation of payments to the Bank of principal, commitment fees, interest or any other amount payable hereunder (except for changes in the rate of tax on the overall net income of the Bank);
- (b) imposes, modifies or holds or shall impose, modify or hold applicable any reserve, special deposit, compulsory loan or similar requirement against assets held by, or deposits or other liabilities in or for the account of, advances or loans by, or other credit extended by, or any other acquisition of funds by, any office of the Bank, which reserve, special deposit, compulsory loan or similar requirement is not otherwise included in determination of the interest rate hereunder;
- (c) imposes or shall impose on the Bank any other condition;

and the result of any of the foregoing is to, directly or indirectly, increase the cost to the Bank of making, renewing or maintaining advances or extensions of credit or issuing or maintaining Letters of Credit or to reduce any amount receivable thereunder then, in any such case, the Borrower shall promptly pay the Bank, upon its demand, any additional amounts necessary to compensate the Bank for such additional cost or reduced amount receivable. If the Bank becomes entitled to claim any additional amounts pursuant to this subsection, it shall promptly notify the Borrower of the event by reason of which it has become so entitled. The good faith determination as to any additional amounts payable pursuant to the foregoing sentence by the Bank shall be conclusive in the absence of manifest error.

- 2.6 Determinations. In making the determinations contemplated by Section 2.4 and 2.5 hereof the Bank may make such estimates, assumptions, allocations and the like that it, in good faith, determines to be appropriate. All such determinations shall be final, binding and conclusive upon the Borrower, except to the extent of any manifest error in computation or transmission. The Bank shall furnish to the Borrower, upon request, a certificate outlining in reasonable detail the computation of any amounts claimed by it under Section 2.4 or 2.5 and the assumptions underlying such computations, provided that the failure to deliver a certificate shall not affect the Bank's right to such amounts.
- 2.7 Payments and Computations. All amounts payable by the Borrower to the Bank under this Agreement or the Note shall be paid directly to the Bank in immediately available funds at the address of the Bank set forth in Section 10.2 hereof or at such other address of which the Bank shall give notice to the Borrower pursuant to Section 10.2 hereof. The Bank is authorized to charge any account of the Borrower at the Bank for any payment due by the Borrower under this Agreement or the Note. Computation of interest hereunder with respect to Adjusted LIBO Rate Loans hereunder shall be made by the Bank on the basis of a year of 360 days for the actual number of days elapsed. Computation of interest hereunder with respect to Adjusted Base Rate Loans hereunder shall be made by the Bank on the basis of a year of 365/366 days (as applicable) for the actual number of days elapsed. All payments under the Note shall be applied by the

Bank to the Obligations in its sole and absolute discretion.

- 2.8 Borrowing. The Borrower shall notify the Bank of each proposed borrowing under the Line of Credit not later than 2:30 p.m., Philadelphia, Pennsylvania time on the day of the proposed borrowing, except as otherwise provided in Section 2.2 with respect to Adjusted LIBO Rate Loans.
- 2.9 Prepayment and Repayment. Subject to Section 2.4 of this Agreement, the Borrower may make payments and prepayments of the Loans in whole or in part at any time and from time to time without penalty or premium upon notification to the Bank not later than 2:30 p.m. Philadelphia, Pennsylvania time on the date of the proposed payment or prepayment.

The Bank may, and the Borrower authorizes the Bank to debit the Borrower's accounts at the Bank for the amount of any payment as and when such payment becomes due hereunder. If there are insufficient funds in such debited account at the time such account is debited, and the debiting creates an overdraft, the Bank may charge the Borrower an administrative fee in an amount established from time to time by the Bank. Such authorization for the Bank to debit the Borrower's accounts at the Bank shall not affect the Borrower's obligation to pay when due all amounts payable hereunder, whether or not there are sufficient funds in accounts of the Borrower. The foregoing rights of the Bank to debit the Borrower's accounts shall be in addition to, and not in limitation of, any rights of set-off which the Bank may have hereunder or under any other Loan Document.

ARTICLE III - SECURITY

- 3.1 Security Documents. As security for the prompt payment, performance, satisfaction and discharge when due of all the Obligations, the Borrower shall execute and deliver or shall cause to be executed and delivered to the Bank, concurrently with the execution of this Agreement, the Security Agreement, the Mortgage, the Patent Assignment, the Trademark Assignment, the Copyright Assignment, the Assignment of Claims, the Guaranty Agreement and the Guarantor Security Agreement.
- 3.2 Additional Documents. The Borrower shall execute and deliver and/or cause to be executed and delivered, concurrently with the execution of this Agreement, the Subordination Agreements and the Landlord's Waivers.

ARTICLE IV - REPRESENTATIONS AND WARRANTIES OF THE BORROWER

In order to induce the Bank to execute and deliver this Agreement and to make the Loans available to the Borrower, the Borrower represents and warrants to the Bank that, as of the date hereof:

- 4.1 Good Standing of the Borrower; Authorization. The Borrower is duly incorporated, organized and existing and in good standing in the Commonwealth of Pennsylvania and is duly qualified as a foreign corporation and authorized to do business in all other jurisdictions wherein the nature of its business or property makes such qualification necessary, except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the Borrower. The Borrower has the corporate power to own its properties and to carry on its business as now conducted. The execution, delivery and performance of this Agreement and the other Loan Documents have been duly authorized by all necessary corporate proceedings on the part of the Borrower.
 - 4.2 Compliance with Laws and Other Agreements. The

Borrower is in compliance with all laws, rules, regulations, judgments, decrees, orders, agreements and requirements which affect in any material way the Borrower, its assets or the operation of its business and has not received, and has no knowledge of, any order or notice of any governmental investigation or of any violation or claim of violation of any law, regulation, judgment, decree, order, agreement, or other governmental requirement.

- 4.3 No Conflict; Governmental Approvals. The execution, delivery, and performance of this Agreement and each of the other Loan Documents will not (i) conflict with, violate, constitute a default under, or result in a breach of any provision of any applicable law, rule, regulation, judgment, decree, order, instrument or other agreement, or (ii) conflict with or result in a breach of any provision of the certificate of incorporation or by-laws of the Borrower. No authorization, permit, consent or approval of or other action by, and no filing, registration or declaration with, any governmental authority or regulatory body is required to be obtained or made by the Borrower for the due execution, delivery and performance of this Agreement or any of the Loan Documents, except such as have been duly obtained or made prior to the Closing Date and are in full force and effect as of the Closing Date (copies of which have been delivered to the Bank on or before the Closing Date).
 - 4.4 Financial and Other Information Regarding Borrower.
- (a) The Borrower has delivered to the Bank true, correct and complete copies of audited financial statements as of February 23, 1996 and internally prepared financial statements of the Borrower as of November 29, 1996. Those financial statements ("Financial Statements") present fairly the financial position of the Borrower as of February 23, 1996 and November 29, 1996 and the results of the operations of the Borrower for the periods then ended in conformity with GAAP.
- (b) The Borrower has no Indebtedness other than as shown in the most recent Financial Statements.
- (c) The Borrower has no "investment" (as such term is defined under GAAP), whether by stock purchase, capital contribution, loan, advance, purchase of property or otherwise, in any Person, other than as shown in the most recent Financial Statements.
- 4.5 Taxes. The Borrower is not delinquent in payment of any income, property or other tax, except for any delinquency in the payment of a tax which is contested in good faith by the Borrower and for which appropriate reserves have been established in accordance with GAAP.

4.6 Encumbrances and Guaranties.

(a) All properties and assets of the Borrower are owned by the Borrower free and clear of all Encumbrances except (i) those for taxes or other government charges either not yet delinquent or the nonpayment of which is permitted by Section 4.5 of this Agreement; (ii) those not arising in connection with Indebtedness that do not materially impair the use or value of the properties or assets of the Borrower in the conduct of its businesses; (iii) Encumbrances whose release and termination is evidenced by the Borrower's delivery to the Bank of appropriate documents on the Closing Date; (iv) the Loan Documents and Encumbrances otherwise permitted under the Security Agreement and the Mortgage; and (v) Encumbrances disclosed in the most recent Financial Statements.

- (b) The Borrower is not obligated under any Guaranty.
- 4.7 Material Adverse Changes. Since November 29, 1996, there has not been any material adverse change in the business, operations, properties or financial position of the Borrower. The Borrower does not know of any fact (other than matters of a general economic or political nature) which materially adversely affects, or, so far as the Borrower can now reasonably foresee, will materially adversely affect, the business, operations, properties or financial position of the Borrower or the performance by the Borrower of its obligations under this Agreement and the other Loan Documents.
- 4.8 Margin Securities. The assets of the Borrower do not include any "margin securities" within the meaning of Regulations G or U of the Board of Governors of the Federal Reserve System (12 C.F.R. 207, 221), and the Borrower does not have any present intention of acquiring any margin security.
- 4.9 ERISA. The provisions of each employee benefit plan as defined in Section 3(3) of ERISA ("Plan") maintained by the Borrower complies with all applicable requirements of ERISA and of the Code, and with all applicable rulings and regulations issued under the provisions of ERISA and the Code setting forth those requirements. Except as listed on Schedule 4.9 hereof, no reportable event, as defined in Section 4043 of ERISA, has occurred with respect to any Plan; no Plan to which Section 4021 of ERISA applies has been terminated; no Plan has incurred any liability to PBGC as provided in Section 4062, 4063 and 4064 of ERISA; no Plan has been involved in any prohibited transaction within the meaning of Section 406 of ERISA or Section 4975 of the Code; and there are no unfunded liabilities with respect to any Plan which are not disclosed in the Financial Statements.
- 4.10 Pending Litigation. There are no actions, suits, proceedings or investigations pending, or, to the knowledge of the Borrower, threatened against or affecting the Borrower, before any court, arbitrator or administrative or governmental body which, in the aggregate, might adversely affect any action taken or to be taken by the Borrower under this Agreement and the other Loan Documents or which, in the aggregate, might materially adversely affect the business, operations, properties or financial position of the Borrower, or the ability of the Borrower to perform its obligations under this Agreement and the other Loan Documents.
- 4.11 Valid, Binding and Enforceable. This Agreement and the other Loan Documents have been duly and validly executed and delivered by the parties thereto (other than the Bank) and constitute the valid and legally binding obligations of such parties enforceable in accordance with their respective terms, except as enforcement of this Agreement and the other Loan Documents may be limited by bankruptcy, insolvency or other laws of general application relating to or affecting the enforcement of creditors' rights and except as enforcement is subject to general equitable principles.
- 4.12 Priority of Mortgage. The Mortgage, when recorded in the office of the Recorder of Deeds of Bucks County, Pennsylvania, will create a valid mortgage lien on the real property described therein, subject only to such Encumbrances as may be expressly permitted by the Mortgage and the Security Agreement.
- 4.13 Priority of Security Interests. The Security Agreement, upon the filing of financing statements in the appropriate governmental offices, will create valid first perfected security interests in the personal property of the

Borrower described therein as collateral for all the Obligations subject to no prior Encumbrances.

4.14 Environmental Matters.

- (a) The Borrower has performed all of its obligations under, has obtained all necessary approvals, permits, authorizations and other consents required by, and is not in material violation of, any Environmental Laws.
- (b) The Borrower has not received any notice, citation, summons, directive, order or other communication, written or oral, from, and the Borrower has no knowledge of the filing or giving of any such notice, citation, summons, directive, order or other communication by, any governmental or quasi-governmental authority or agency or any other Person concerning the presence, generation, treatment, storage, transportation, transfer, disposal, release or other handling of any Hazardous Materials within, on, from, related to, or affecting any real property owned or occupied by the Borrower.
- (c) To the best of the Borrower's knowledge, after reasonable inquiry, no real property owned or occupied by the Borrower has ever been used, either by the Borrower or any of its predecessors in interest, to generate, treat, store, transport, transfer, dispose of, release or otherwise handle any Hazardous Material in violation of any applicable Environmental Laws.
- (d) To the best of the Borrower's knowledge, after due inspection, there are no Hazardous Materials within, on or under any real property owned or occupied by the Borrower in violation of any applicable Environmental Laws.
- 4.15 No Untrue Statements. Neither this Agreement, the Loan Documents nor any other document, certificate or statement furnished or to be furnished by the Borrower or by any other party to the Bank in connection herewith contains, or at the time of delivery will contain, any untrue statement of a material fact or omits or will omit to state a material fact necessary in order to make the statements contained herein and therein not misleading.

ARTICLE V - CONDITIONS PRECEDENT TO THE BANK'S OBLIGATIONS

The Bank's obligations hereunder are conditioned upon the satisfaction of the following conditions precedent:

- $5.1\,$ Documents and Items to be Delivered by the Borrower at Closing. The Borrower shall deliver or cause to be delivered to the Bank at the Closing the following:
 - (a) This Agreement duly executed by the Borrower;
 - (b) The Note duly executed by the Borrower;
- (c) The Security Agreement duly executed by the Borrower, together with such Uniform Commercial Code financing statements and other documents as the Bank may reasonably require to be executed by the Borrower;
- (d) The Mortgage duly executed by the Borrower and acknowledged, in form suitable for recording;
- (e) The Patent Assignment duly executed by the Borrower and acknowledged in form suitable for recording;
- (f) The Trademark Assignment duly executed by the Borrower and acknowledged, in form suitable for recording;

- (g) The Copyright Assignment;
- $\hbox{ (h)} \quad \hbox{The Assignment of Claims duly executed by the } \\ \text{Borrower:} \\$
- (i) The Guaranty Agreements duly executed by the Guarantors;
- (j) The Guarantor Security Agreements duly executed by the Guarantors;
- (k) Evidence of the Borrower's having complied with those covenants regarding insurance as are contained in this Agreement and the other Loan Documents;
- (1) A certificate of the Secretary or an Assistant Secretary of the Borrower dated the Closing Date including (i) resolutions duly adopted by the Borrower authorizing the transactions under the Loan Documents; (ii) a copy of the by-laws of the Borrower; (iii) evidence of the incumbency and signature of the officers executing on its behalf any of the Loan Documents and any other document to be delivered pursuant to any such documents, together with evidence of the incumbency of such Secretary or Assistant Secretary; (iv) a copy, certified by the Pennsylvania Secretary of State, as of the most recent date practicable, of the Borrower's Articles and Certificate of Incorporation, together with the certification of the Secretary or Assistant Secretary of the Borrower as of the Closing Date that such Articles and Certificate of Incorporation have not been amended since the date of the aforesaid certification by the Secretary of State; and (v) certificates of authority or good standing for the Borrower from its jurisdiction of incorporation and any other jurisdiction where the Borrower is qualified to do business;
- (m) A copy of each and every authorization, permit, consent, and approval of and other action by, and notice to and filing with, every governmental authority and regulatory body which is required to be obtained or made by the Borrower for the due execution, delivery and performance of this Agreement and the other Loan Documents;
- (n) Policies of title insurance issued by a title company satisfactory to the Bank insuring the Mortgage, as a valid mortgage lien, subject only to exceptions approved by the Bank;
- (o) The opinion of Stevens & Lee, dated as of Closing Date, in form and substance satisfactory to the Bank and its counsel;
- (p) To the extent not paid by the Borrower to the Bank prior to the Closing, a facility fee of \$75,000.00;
- (q) Appraisals of: (i) Borrower's real estate located at County Line Industrial Park, Southampton, PA and (ii) Borrower's machinery and equipment, which appraisals shall be prepared at the Borrower's expense, shall be satisfactory in form and substance to the Bank and shall indicate that the total fair market value of the above-described real property, together with Borrower's appraised machinery and equipment, is not less than \$2,500,000.00;
- (r) An environmental risk assessment database report, which report shall be prepared at Borrower's expense, with respect to the Borrower's real estate located at County Line Industrial Park, Southampton, Pennsylvania and the surrounding

area, which report shall be satisfactory to the Bank in its sole and absolute discretion;

- (s) Management prepared Financial Statements for the year ended February 28, 1997 evidencing results satisfactory to the Bank, in the Bank's sole and absolute discretion;
- (t) Evidence that all Accounts owing by Account debtors located in countries which the Bank has rated "Country Risk Rate 3" or worse are supported by a letter of credit acceptable to the Bank in its sole and absolute discretion;
- (u) A twelve-month budget of cash flows sufficient for the Bank to match actual cash flows to projected cash flows for individual existing and anticipated contracts;
- (v) A list of all Accounts supported by a letter of credit, including a summary of limitations or conditions with respect to such letter of credit.
- 5.2 Bank's Audit. The Bank or the Bank's designee's completion of an audit of Borrower's Accounts, inventory, costs in excess of billings, accounts payable and billings in excess of costs which audit shall be acceptable to the Bank, in both its scope and its conclusions, in the Bank's sole and absolute discretion. The cost of such audit shall be borne by the Borrower.
 - 5.3 Additional Financing. The Borrower's obtaining:
- (a) \$4,000,000 of unsecured, subordinated debt upon terms and conditions satisfactory to the Bank in its sole and absolute discretion; and
- (b) \$2,500,000 of non-cumulative, convertible, preferred stock upon terms and conditions satisfactory to the Bank in its sole and absolute discretion.
- 5.4 Conditions Precedent to Making Line of Credit Loans. The Bank shall not be obligated to make any Line of Credit Loans hereunder or make Letters of Credit available hereunder unless:
- (a) As of the date of the proposed advance, no Event of Default has occurred and is continuing and no event has occurred and is continuing which, with the giving of notice or lapse of time, or both, would constitute an Event of Default;
- (b) The representations and warranties contained in Article IV are true and correct on the date of the proposed advance, except that the representations and warranties in Section 4.4 shall refer to the financial statements most recently supplied to the Bank pursuant to Section 6.2 of this Agreement;
- (c) No material adverse change has occurred in the financial condition of the Borrower since the date hereof; and
- (d) The Borrower has delivered to the Bank, upon the Bank's request, a certificate executed by the chief executive officer of the Borrower confirming the statements made in paragraphs (a), (b), and (c) above.
- 5.5 Conditions Subsequent. The Borrower shall deliver or cause to be delivered, on or before April 14, 1997, the opinion(s) of Stevens & Lee, in form and substance satisfactory to the Bank and its counsel with respect to each of the Guarantors. The failure of the Borrower to deliver such opinion(s) to Bank on or before April 4, 1997 shall constitute an Event of Default under Article VIII of this Agreement.

The Borrower hereby covenants and agrees that from the date hereof and until satisfaction in full of the Obligations, unless the Bank shall otherwise consent in writing, the Borrower shall do the following:

- $6.1\,$ Use of Proceeds. Use the proceeds of the borrowings hereunder only for the purposes specified in Section 2.1 of this Agreement.
 - 6.2 Financial Statements. Furnish to the Bank:
- (a) Within ninety days after the end of each fiscal year, financial statements of the Borrower, including a balance sheet, statement of income, reconciliation of net worth, statement of cash flows and such other financial statements of the Borrower in such detail as the Bank may reasonably request. Such financial statements shall present fairly the financial condition of the Borrower as of the close of such year and the results of its operations and its cash flows during such year, in accordance with GAAP, and shall be audited and accompanied by the opinion of an independent public accountant acceptable to the Bank. Such opinion shall not be acceptable to the Bank if qualified due to any limitations in scope imposed by the Borrower. Any other qualification by the accountant shall render the acceptability of the financial statements subject to the Bank's approval. Such financial statements shall be accompanied by a certificate signed by the chief financial office of the Borrower in which such chief financial officer calculates all financial covenants and warrants that no Events of Default specified in Article VIII hereof nor any events which with the giving of notice or lapse of time, or both, would constitute an Event of Default exist.
- (b) Within forty-five days after the end of each fiscal quarter, a balance sheet, statement of income, statement of cash flows and such other financial statements in such detail as the Bank may reasonably request, which shall present fairly the financial position of the Borrower as of the end of such quarter and the results of its operations and a statement of cash flows during such quarter, in accordance with GAAP, certified by the chief financial officer of the Borrower. Such financial statements shall be accompanied by a certificate signed by the chief financial officer of the Borrower in which such chief financial officer calculates all financial covenants and warrants that no Events of Default specified in Article VIII hereof nor any events which with the giving of notice or lapse of time, or both, would constitute an Event of Default exist.
- (c) Within forty-five days after the end of each fiscal year, a cash flow budget for the new fiscal year setting forth budgeted monthly and cumulative cash inflows and outflows for the year, in adequate detail and with explanatory supporting notes and schedules itemizing cash flows on a contract-by-contract basis as requested by the Bank.
- (d) Within forty-five days after the end of each fiscal quarter, a revised cash flow budget reconciling budgeted and actual cash flows and explaining in sufficient detail the causes of any variances between budgeted cash flows and actual cash flows.
- (e) When requested by Bank or, if not requested by the Bank, within forty-five days after the end of each fiscal quarter, a detailed aging of Accounts by customer within department (domestic non-government, U.S. government and

international) with summary totals by age within and across departments. Such aging shall also include the original date of each invoice with respect to an Account, shall indicate which Accounts are supported by a letter of credit and shall include a summary of limitations or conditions with respect to such letters of credit.

- (f) When requested by the Bank or, if not requested by the Bank, within forty-five days after the end of each fiscal quarter, a schedule of contracts-in-progress, which schedule shall include for each contract the name of the contract party, the original and revised contract values, the original and revised cost estimates and profit percentage estimates, the percent complete, the projected costs to complete and the billings in excess of costs or the costs in excess of billings with summary totals for all categories.
- (g) When filed, a copy of any and all reports filed by the Borrower with the U.S. Securities and Exchange Commission, including, but not limited to, Forms 10Q and 10K.
- 6.3 Ordinary Course of Business; Records. Conduct its business only in the ordinary course and keep accurate and complete books and records of its assets, liabilities and operations consistent with sound business practices and in accordance with GAAP.
- 6.4 Information for the Bank. Make available during normal business hours for inspection by the Bank or its designated representatives any of its books and records when reasonably requested by the Bank to do so, and furnish the Bank any information reasonably requested regarding its operations, business affairs and financial condition within a reasonable time after the Bank gives notice of its request therefor. In particular, and without limiting the foregoing, the Borrower shall permit, during normal business hours, representatives of the Bank's Audit Department to make such periodic inspections of the Borrower's books, records and assets as such representatives deem necessary and proper.
- 6.5 Insurance. Carry at all times with financially sound and reputable insurers: (a) all workers' compensation or similar insurance as may be required under the laws of any jurisdiction; (b) public liability insurance against claims for personal injury, death or property damage suffered upon, in or about any premises occupied by it or occurring as a result of the ownership, maintenance or operation by it of any automobile, truck or other vehicle or as a result of the use of products manufactured, constructed or sold by it, or services rendered by it; (c) business interruption insurance covering risk of loss as a result of the cessation for all or any part of one year of any substantial part of the business conducted by it; (d) hazard insurance against such other hazards as are usually insured against by business entities of established reputation engaged in like businesses and similarly situated, including, without limitation, fire (flood, if applicable) and extended coverage; and (e) such other insurance as the Bank may from time to time reasonably require, and pay all premiums on the policies for all such insurance when and as they become due and take all other actions necessary to maintain such policies in full force and effect at all times. The insurance specified in Subsections (b), (c) and (d) shall be maintained in such amounts (and with coinsurance and deductibles) as such insurance is usually carried by business entities of established reputation engaged in the same or similar business and similarly situated. The Borrower shall from time to time, upon request by the Bank, promptly furnish or cause to be furnished to the Bank evidence, in form and substance satisfactory to the Bank, of the maintenance of all

insurance required to be maintained hereby, including, without limitation, such originals or copies as the Bank may request of policies, certificates of insurance, riders and endorsements relating to such insurance and proof of premium payments. The Borrower shall cause each hazard insurance policy to provide, and the insurer issuing each such policy to certify to the Bank, that (a) if such insurance be proposed to be canceled or materially changed for any reason whatsoever, such insurer will promptly notify the Bank and such cancellation or change shall not be effective for 30 days after receipt by the Bank of such notice, unless the effect of such change is to extend or increase coverage under the policy; (b) the Bank shall be named as lender loss payee with respect to personal property and mortgagee with respect to real property; and (c) the Bank will have the right, at its election, to remedy any default in the payment of premiums within 30 days of notice from the insurer of such default. The foregoing covenants regarding insurance are in addition to, and not intended to supersede, those covenants regarding insurance set forth in the Security Agreement. In the event and to the extent of any conflict between the provisions of this Agreement and the provisions of the Security Agreement regarding the insuring of Collateral, the provisions of the Security Agreement with respect thereto shall govern.

- 6.6 Maintenance. Maintain its equipment, real property and other properties in good condition and repair (normal wear and tear excepted) and pay and discharge the cost of repairs thereto or maintenance thereof.
- 6.7 Taxes. Pay all taxes, assessments, charges and levies imposed upon it or on any of its property, or which it is required to withhold and pay over, and provide evidence of payment thereto to the Bank if the Bank so requests, except where contested in good faith by lawful and appropriate proceedings and where adequate reserves therefor have been set aside on its books; provided, however, that the Borrower shall pay all such taxes, assessments, charges and levies forthwith whenever foreclosure on any lien which attaches or security therefor appears imminent.
- 6.8 Leases. Pay all rent or other sums required by every lease to which the Borrower is a party as the same becomes due and payable, perform all its obligations as tenant or lessee thereunder except where contested in good faith by lawful and appropriate proceedings and where adequate reserves therefor have been set aside; and keep all such leases at all times in full force and effect during the terms thereof.
- 6.9 Corporate Existence; Certain Rights; Laws. Do all things necessary to preserve and keep in full force and effect in each jurisdiction in which it conducts business the business existence, licenses, permits, rights, copyrights, patents, trademarks, trade names and franchises of the Borrower and comply with all present and future laws, ordinances, rules, regulations judgments, orders and decrees which affect in any material way the Borrower, its assets or the operation of its business.
- 6.10 Notice of Litigation or Other Proceedings. Give immediate notice to the Bank of (i) the existence of any dispute, (ii) the institution of any litigation, administrative proceeding or governmental investigation involving the Borrower or (iii) the entry of any judgment, decree or order against or involving the Borrower, any of which might materially and adversely affect the operation, financial condition, property or business of the Borrower or affect the enforceability of this Agreement or any of the other Loan Documents.
 - 6.11 Indebtedness. Pay or cause to be paid when due (or

within applicable grace periods) all Indebtedness of the Borrower.

- 6.12 Notice of Events of Default. Give immediate notice to the Bank if the Borrower becomes aware of the occurrence of any Event of Default, or of any fact, condition or event which with the giving of notice or lapse of time, or both, would be an Event of Default, or of the failure of the Borrower to observe or perform any of the conditions or covenants to be observed or performed by it under this Agreement or any of the other loan Documents.
- 6.13 ERISA. Maintain each Plan in compliance with all applicable requirements of ERISA and of the Code and with all applicable rulings and regulations issued under the provisions of ERISA and of the Code. As promptly as practicable (but in any event not later than ten days) after the Borrower receives from the PBGC a notice of intent to terminate any Plan or to appoint a trustee to administer any Plan, after the Borrower has notified the PBGC that any reportable event, as defined in Section 4043 of ERISA, with respect to any Plan has occurred, or after the Borrower has provided a notice of intent to terminate to each affected party, as defined for purposes of Section 4041(a)(2) of ERISA, with respect to any Plan, a certificate of the chief executive officer of the Borrower shall be furnished to the Bank setting forth the details with respect to the events resulting in such reportable event, as the case may be, and the action which the Borrower proposes to take with respect thereto, together with a copy of the notice of intent to terminate or to appoint a trustee from the PBGC, of the notice of such reportable event or of the Borrower's notice of intent to terminate, as the case may
- 6.14 Deposit Accounts. Use the Bank as its depository institution unless otherwise agreed in writing by the Bank; and notify the Bank, in writing and on a continuing basis, of all deposit accounts and certificates of deposit (including the numbers thereof) maintained with or purchased from other banks and other financial institutions.
- 6.15 Management. Furnish to Bank within five (5) days of any election or appointment of officers or directors, written notice of any change in the persons who from time to time become officers and directors of Borrower and cause William F. Mitchell, Chairman and President and Duane Deaner, Chief Financial Officer, to continue in their current positions with the Borrower.
- 6.16 Financial Covenants. Observe the financial covenants set forth on Schedule 6.16 attached hereto and made a part hereof.
- 6.17 Compliance with Environmental Laws. Comply fully with all Environmental Laws and not use any property which it owns or occupies to generate, treat, store, transport, transfer, dispose of, release or otherwise handle any Hazardous Material, except in compliance with all Environmental Laws.
- 6.18 Foreign Accounts. The Bank shall obtain letters of credit acceptable to the Bank, in the Bank's sole and absolute discretion, to support Accounts owed by Account debtors located in countries which the Bank has rated or later rates as having a Country Risk Rate of "3" or worse.
- 6.19 Further Actions. Cooperate and join with the Bank, at its own expense, in taking all such further actions as the Bank, in its sole judgment, shall deem necessary to effectuate the provisions of the Loan Documents and to perfect or continue the perfected status of all Encumbrances granted to the Bank pursuant

to the Loan Documents, including, without limitation, the execution, delivery and filing of financing statements, amendments thereto and continuation statements, the delivery of chattel paper, documents or instruments to the Bank, and the notation of Encumbrances in favor of the Bank on certificates of title.

ARTICLE VII - NEGATIVE COVENANTS

The Borrower hereby covenants and agrees that from the Closing Date until satisfaction in full of the Obligations, it will not do any one or more of the following without first obtaining the written consent of the Bank:

- 7.1 Fundamental Corporate Changes.
- (a) change its name, enter into or effect any merger, consolidation, share exchange, division, conversion, reclassification, recapitalization, reorganization or other transaction of like effect, or dissolve;
- (b) sell, transfer, lease or otherwise dispose of all or (except in the ordinary course of business) any material part of its assets or any significant product line or process; or
 - (c) have any Subsidiary.
- 7.2 Indebtedness. Incur, create, assume or have any Indebtedness except:
 - (a) the Loans;
 - (b) the Letters of Credit;
- (c) the Chase Letters of Credit listed on Schedule 7.2 hereof (which letters of credit, upon their expiration, shall not be renewed);
 - (d) the Subordinated Debt; and
 - (e) not more than \$100,000 of other Indebtedness.
- 7.3 Encumbrances. Create or allow any Encumbrances to be on or otherwise affect any of its property or assets except:
 - (a) encumbrances in favor of the Bank;
- (b) encumbrances for taxes, assessments and other governmental charges incurred in the ordinary course of business which are not yet due and payable;
- (c) pledges or deposits made in the ordinary course of business to secure payment of workmen's compensation or to participate in any fund in connection with workmen's compensation, unemployment insurance or other social security obligations;
- (d) good faith pledges or deposits made in the ordinary course of business to secure performance of tenders, contracts (other than for the repayment of Indebtedness) or leases or to secure statutory obligations or surety, appeal, indemnity, performance or other similar bonds required in the ordinary course of business;
- (e) liens of mechanics, materialmen, warehousemen, carriers or other similar liens, securing obligations incurred in the ordinary course of business that are not yet due and payable;

- (f) encumbrances securing Indebtedness permitted under Section 7.2(c) and (e), provided that (i) no other covenants of this Agreement are thereby violated and (ii) no assets other than the assets so acquired secure such Indebtedness;
- (g) encumbrances, if any, otherwise expressly permitted by the Security Agreement or the Mortgage; and
- $\hbox{ (h)} \quad \hbox{ Encumbrances disclosed in the Financial Statements.}$
 - 7.4 Guaranties. Directly or indirectly make any Guaranty.
- 7.5 Sales and Lease-Backs. Sell, transfer or otherwise dispose of any property, real or personal, now owned or hereafter acquired, with the intention of directly or indirectly taking back a lease on such property.
- 7.6 Loans, Investments. Purchase, invest in, or make any loan in the nature of an investment in the stocks, bonds, notes or other securities or evidence of Indebtedness of any person, except for (i) short-term obligations of the Treasury of the United States of America; (ii) certificates of deposit issued by banks with shareholders' equity of at least \$100,000,000; (iii) repurchase agreements not exceeding 29 days in duration issued by banks with shareholders' equity of at least \$100,000,000; or (iv) notes and other instruments generally known as "commercial paper" which arise out of current transactions, which have maturities at the time of issuance thereof not exceeding nine months and which have, at the time of such purchase, investment or other acquisition, the highest credit rating of Standard & Poor's Corporation or Moody's Investors Service, Inc, or make any loan or advance to or for the benefit of any person, except for ordinary course advances to employees for business travel and other expenses.
- 7.7 Change in Business. Discontinue any substantial part, or change the nature of, the business of the Borrower, or enter into any new business unrelated to the present business conducted by the Borrower.
- 7.8 Sale or Discount of Receivables. Sell any notes receivable or accounts receivable, with or without recourse.
- $7.9\,$ Prepayment of Indebtedness. Make any voluntary prepayments of Indebtedness other than the Loans.

7.10 ERISA.

- (a) Terminate any Plan maintained by the Borrower to which Section 4021 of ERISA applies;
- (b) Allow the value of the benefits guaranteed under Title IV of ERISA to exceed the value of assets allocable to such benefits;
- (c) Incur a withdrawal liability within the meaning of Section 4201 of ERISA.

7.11 Restricted Payments.

(a) Declare or pay any dividend, or make any distributions of cash or property, to holders of any shares of its capital stock, or, directly or indirectly, redeem or otherwise acquire any such shares or any option, warrant or right to acquire any such shares; provided, however, that absent an Event of Default hereunder or an event which with the giving of notice or lapse of time, or both, would constitute an Event of

Default hereunder, Borrower may pay dividends not to exceed \$68,750 per fiscal quarter in accordance with the terms of that certain Preferred Stock Purchase Agreement.

- (b) Permit payment, whether in cash or otherwise, of any amount on account of the Subordinated Debt, except payment of interest (absent an Event of Default hereunder or an event which with the giving of notice or lapse of time, or both, would constitute an Event of Default hereunder) in accordance with the terms of the agreements between the Borrower and the holders of the Subordinated Debt.
- 7.12 Compliance with Federal Reserve Board Regulations.
 (i) Use any of the proceeds of the Loans, directly or indirectly, for the purposes of purchasing or carrying any "margin security" within the meaning of Regulations G or U of the Board of Governors of the Federal Reserve System (12 C.F.R. 207, 221), (ii) use any of the proceeds of the Loans, directly or indirectly, for the purpose of purchasing, carrying or trading in any securities under such circumstances as to involve the Borrower in a violation of Regulation X of such Board (12 C.F.R. 224), or (iii) take or permit to be taken any other action which would result in the Loans or the consummation of any of the other transactions contemplated hereby being violative of such regulations or any other regulation of such Board.
- 7.13 Change in Ownership. Allow William Mitchell and Pete Stephens, together, to own, directly or indirectly, less than thirty percent (30%) of the outstanding shares of voting common stock of the Borrower.

ARTICLE VIII - EVENTS OF DEFAULT

An event of default ("Event of Default") under this Agreement shall be deemed to exist if any one or more of the following events occurs and is continuing, whatever the reason therefor:

- 8.1 Borrower's Failure to Pay. The Borrower fails to pay any amount of principal, interest, fees or other sums as and when due under this Agreement or any of the other Loan Documents, or any other Obligations, whether upon stated maturity, acceleration, or otherwise.
- 8.2 Breach of Covenants or Conditions. The Borrower (i) fails to perform or observe any term, covenant, agreement or condition set forth in Section 6.16 or Article VII of this Agreement, or (ii) fails to perform or observe any other term, covenant, agreement or condition set forth in this Agreement or any of the other Loan Documents or is in violation of or non-compliance with any provision of this Agreement (other than those set forth in Section 6.16 and Article VII) or any of the Loan Documents, and, with respect only to clause (ii) above, has not remedied and fully cured such non-performance, non-observance, violation of or non-compliance within fifteen (15) days after the Bank has given written notice thereof to the Borrower; provided, however, that during such fifteen (15) day period the Bank's obligations to make further Loans to the Borrower shall be suspended.
- 8.3 Defaults in Other Agreements. The Borrower fails to perform or observe any term, covenant, agreement or condition contained in, or there shall occur any default under or as defined in, any other agreement applicable to the Borrower or by which the Borrower is bound involving a material liability of the Borrower which shall not be remedied within the period of time (if any) within which such other agreement permits such default to be remedied, unless such default is waived by the other party

thereto or excused as a matter of law.

- 8.4 Agreements Invalid. The validity, binding nature of, or enforceability of any material term or provision of any of the Loan Documents is disputed by, on behalf of, or in the right or name of the Borrower or any material term or provision of any such Loan Document is found or declared to be invalid, avoidable, or non-enforceable by any court of competent jurisdiction.
- 8.5 False Warranties; Breach of Representations. Any warranty or representation made by the Borrower in this Agreement or any other Loan Document or in any certificate or other writing delivered under or pursuant to this Agreement or any other Loan Document, or in connection with any provision of this Agreement or related to the transactions contemplated hereby shall prove to have been false or incorrect or breached in any material respect on the date as of which made.
- 8.6 Judgments. A final judgment or judgments is entered, or an order or orders of any judicial authority or governmental entity is issued against the Borrower (other than judgments disclosed on Schedule A to the Security Agreement), which is uninsured (such judgment(s) and order(s) hereinafter collectively referred to as "Judgment") (i) in the United States, the United Kingdom, Canada, or any other jurisdiction in which the common law applies for payment of money, which Judgment, in the aggregate, exceeds One Hundred Thousand Dollars (\$100,000.00) outstanding at any one time; or (ii) in any other jurisdiction, for payment of money, which judgment, in the aggregate, exceeds Five Hundred Thousand Dollars (\$500,000) outstanding at any one time or (iii) for injunctive or declaratory relief which would have a material adverse effect on the ability of the Borrower to conduct its business, and such Judgment is not discharged or execution thereon or enforcement thereof stayed pending appeal, within thirty days after entry or issuance thereof, or, in the event of such a stay, such Judgment is not discharged within thirty days after such stay expires.

8.7 Bankruptcy or Insolvency of the Borrower.

- (a) The Borrower or any Guarantor becomes insolvent, or generally fails to pay, or is generally unable to pay, or admits in writing its inability to pay, its debts as they become due or applies for, consents to, or acquiesces in, the appointment of a trustee, receiver or other custodian for the Borrower or a substantial part of its property, or makes a general assignment for the benefit of creditors.
- (b) The Borrower or any Guarantor commences any bankruptcy, reorganization, debt arrangement, or other case or proceeding under any state or federal bankruptcy or insolvency law, or any dissolution or liquidation proceeding.
- (c) Any bankruptcy, reorganization, debt arrangement, or other case or proceeding under any state or federal bankruptcy or insolvency law, or any dissolution or liquidation proceeding, is involuntarily commenced against or in respect of the Borrower or any Guarantor or an order for relief is entered in any such proceeding, which is not dismissed within sixty days.
- 004 A trustee, receiver, or other custodian is appointed for the Borrower or any Guarantor or a substantial part of the Borrower's or any Guarantor's property.

ARTICLE IX - REMEDIES

- (a) Upon the occurrence of any one or more Events of Default, the Bank may, in its sole discretion, refuse to make any further advances or Loans to the Borrower.
- (b) Automatically upon the occurrence of any Event of Default described in Section 8.7 of this Agreement, and in the sole discretion of the Bank upon the occurrence of any other Event of Default, the unpaid principal balance of all Loans, all interest and fees accrued and unpaid thereon, and all other amounts and Obligations payable by the Borrower under this Agreement and the other Loan Documents shall immediately become due and payable in full, all without protest, presentment, demand, or further notice of any kind to the Borrower, all of which are expressly waived by the Borrower.
- (c) If any of the Obligations shall be due and payable or any one or more Events of Default shall have occurred, the Bank shall have the right, in addition to all other rights and remedies available to it, without notice to the Borrower, to apply toward and set-off against and apply to the then unpaid balance of the Note and the other Obligations any items or funds held by the Bank, any and all deposits (whether general or special, time or demand, matured or unmatured, fixed or contingent, liquidated or unliquidated) now or hereafter maintained by the Borrower for its own account with the Bank, and any other indebtedness at any time held or owing by the Bank to or for the credit or the account of the Borrower. For such purpose the Bank shall have, and the Borrower hereby grants to the Bank, a first lien on all such deposits. The Bank is hereby authorized to charge any such account or indebtedness for any amounts due to the Bank. Such right of set-off shall exist whether or not the Bank shall have made any demand under this Agreement, the Note or any other Loan Document and whether or not the Note and the other Obligations are matured or unmatured. The Borrower hereby confirms the Bank's lien on such accounts and right of set-off, and nothing in this Agreement shall be deemed any waiver or prohibition of such lien and right of set-off.

9.2 Further Remedies; Confession of Judgment.

- (a) Upon the occurrence of any one or more Events of Default, the Bank may proceed to protect and enforce its rights under this Agreement and the other Loan Documents by exercising such remedies as are available to the Bank in respect thereof under applicable law, either by suit in equity or by action at law, or both, whether for specific performance of any provision contained in this Agreement or any of the other Loan Documents or any of the other Loan Documents.
- (b) THE FOLLOWING PARAGRAPH SETS FORTH A POWER OF AUTHORITY FOR ANY ATTORNEY TO CONFESS JUDGMENT AGAINST BORROWER. IN GRANTING THIS WARRANT OF ATTORNEY TO CONFESS JUDGMENT AGAINST BORROWER, THE BORROWER, FOLLOWING CONSULTATION WITH (OR DECISION NOT TO CONSULT) SEPARATE COUNSEL FOR BORROWER AND WITH KNOWLEDGE OF THE LEGAL EFFECT HEREOF, HEREBY KNOWINGLY, INTENTIONALLY, VOLUNTARILY, INTELLIGENTLY AND UNCONDITIONALLY WAIVES ANY AND ALL RIGHTS THE BORROWER HAS OR MAY HAVE TO PRIOR NOTICE AND AN OPPORTUNITY FOR HEARING UNDER THE RESPECTIVE CONSTITUTIONS AND LAWS OF THE UNITED STATES OF AMERICA, COMMONWEALTH OF PENNSYLVANIA, OR ELSEWHERE INCLUDING, WITHOUT LIMITATION, A HEARING PRIOR TO GARNISHMENT AND ATTACHMENT OF THE BORROWER'S BANK ACCOUNT AND OTHER ASSETS. BORROWER ACKNOWLEDGES AND UNDERSTANDS THAT BY ENTERING INTO THIS AGREEMENT CONTAINING A CONFESSION OF JUDGMENT CLAUSE THAT BORROWER IS VOLUNTARILY, INTELLIGENTLY AND KNOWINGLY GIVING UP ANY AND ALL RIGHTS, INCLUDING CONSTITUTIONAL RIGHTS, THAT BORROWER HAS OR MAY HAVE TO NOTICE AND A HEARING BEFORE JUDGMENT CAN BE ENTERED AGAINST

BORROWER AND BEFORE THE BORROWER'S ASSETS, INCLUDING, WITHOUT LIMITATION, ITS BANK ACCOUNTS, MAY BE GARNISHED, LEVIED, EXECUTED UPON AND/OR ATTACHED. BORROWER UNDERSTANDS THAT ANY SUCH GARNISHMENT, LEVY, EXECUTION AND/OR ATTACHMENT SHALL RENDER THE PROPERTY GARNISHED, LEVIED, EXECUTED UPON OR ATTACHED IMMEDIATELY UNAVAILABLE TO BORROWER. IT IS SPECIFICALLY ACKNOWLEDGED BY BORROWER THAT THE BANK HAS RELIED ON THIS WARRANT OF ATTORNEY AND THE RIGHTS WAIVED BY BORROWER HEREIN IN ENTERING INTO THIS AGREEMENT AND AS AN INDUCEMENT TO EXTEND CREDIT TO THE BORROWER.

Upon the occurrence of an Event of Default hereunder or under any other Loan Document, Borrower hereby jointly and severally authorizes and empowers any attorney of any court of record or the prothonotary or clerk of any county in the Commonwealth of Pennsylvania, or in any jurisdiction where permitted by law or the clerk of any United States District Court, to appear for Borrower in any and all actions which may be bought hereunder and enter and confess judgment against the Borrower or any of them in favor of the Bank for such sums as are due or may become due hereunder or under any other Loan Documents, together with costs of suit and actual collection costs including, without limitation, reasonable attorneys' fees equal to 1% of the Obligations then due and owing but in no event less than \$5,000.00, with or without declaration, without prior notice, without stay of execution and with release of all procedural errors and the right to issue executions forthwith. To the extent permitted by law, Borrower waives the right of inquisition on any real estate levied on, voluntarily condemns the same, authorizes the prothonotary or clerk to enter upon the writ of execution this voluntary condemnation and agrees that such real estate may be sold on a writ of execution; and also waives any relief from any appraisement, stay or exemption law of any state now in force or hereafter enacted. Borrower further waives the right to any notice and hearing prior to the execution, levy, attachment or other type of enforcement of any judgment obtained hereunder, including, without limitation, the right to be notified and heard prior to the garnishment, levy, execution upon and attachment of Borrower's bank accounts and other property. If a copy of this Agreement verified by affidavit of any officer of the Bank shall have been filed in such action, it shall not be necessary to file the original thereof as a warrant of attorney, any practice or usage to the contrary notwithstanding. The authority herein granted to confess judgment shall not be exhausted by any single exercise thereof, but shall continue and may be exercised from time to time as often as the Bank shall find it necessary and desirable and at all times until full payment of all amounts due hereunder and under any other Loan Documents. The Bank may confess one or more judgments in the same or different jurisdictions for all or any part of the Obligations arising hereunder or under any other Loan Documents to which Borrower is a party, without regard to whether judgment has theretofore been confessed on more than one occasion for the same Obligations. In the event that any judgment confessed against the Borrower is stricken or opened upon application by or on behalf of Borrower or any obligor for any reason, the Bank is hereby authorized and empowered to again appear for and confess judgment against Borrower for any part or all of the Obligations owing under this Agreement and/or for any other liabilities, as herein provided.

ARTICLE X - MISCELLANEOUS

10.1 Remedies Cumulative; No Waiver. The rights, powers and remedies of the Bank provided in this Agreement and the other Loan Documents are cumulative and not exclusive of any right, power or remedy provided by law or equity, and no failure or delay on the part of the Bank in the exercise of any right, power, or remedy shall operate as a waiver thereof, nor shall any

single or partial exercise of any right, power, or remedy preclude other or further exercise thereof, or the exercise of any other right, power or remedy.

10.2 Notices. Every notice and communication under this Agreement or any of the other Loan Documents shall be in writing and shall be given by either (i) hand-delivery, (ii) first class mail (postage prepaid), (iii) reliable overnight commercial courier (charges prepaid), or (iv) telecopy or other means of electronic transmission, if confirmed promptly by any of the methods specified in clauses (i), (ii) and (iii) of this sentence, to the following addresses:

If to the Borrower:

Environmental Tectonics Corporation County Line Industrial Park Southampton, Pennsylvania 18966-3877 Attn: William F. Mitchell, President Telecopy No: (215) 357-4000

With a copy to:

Jeffrey P. Waldron, Esquire Stevens & Lee, P.C. One Glenhardie Corporate Center Suite 202 1275 Drummers Lane P.O. Box 236 Wayne, Pennsylvania 19087-0236 Telecopy No.: (610) 687-1384

If to the Bank:

First Union National Bank
Portfolio Management
Witherspoon Building, PA 1310
Broad & Walnut Streets
Philadelphia, Pennsylvania 19109
Attn: Jack Albaugh
Telecopy No.: (215) 985-3143 or 985-3149

With a copy to:

Duane, Morris & Heckscher One Liberty Place Philadelphia, Pennsylvania 19103 Attn: James L. Allison, Esquire Telecopy No.: (215) 979-1020

Notice given by telecopy or other means of electronic transmission shall be deemed to have been given and received when sent. Notice by overnight courier shall be deemed to have been given and received on the date scheduled for delivery. Notice by mail shall be deemed to have been given and received three (3) calendar days after the date first deposited in the United States Mail. Notice by hand delivery shall be deemed to have been given and received upon delivery.

A party may change its address by giving written notice to the other party as specified herein.

10.3 Costs, Expenses and Attorneys' Fees. Whether or not the transactions contemplated by this Agreement and the other Loan Documents are fully consummated, the Borrower shall promptly pay (or reimburse, as the Bank may elect) all costs and expenses which the Bank has incurred or may hereafter incur in connection with the negotiation, preparation, reproduction, interpretation

and enforcement of this Agreement and the other Loan Documents, the collection of all amounts due hereunder and thereunder, and any amendment, modification, consent or waiver which may be hereafter requested by the Borrower or otherwise required. Such costs and expenses shall include, without limitation, the fees and disbursements of counsel to the Bank, the costs of appraisal fees, searches of public records, costs of filing and recording documents with public offices, and similar costs and expenses incurred by the Bank. Upon the occurrence of an Event of Default, such costs shall also include the fees of any accountants, consultants or other professionals retained by the Bank. The Borrower's reimbursement obligations under this Section shall survive any termination of this Agreement.

- 10.4 Survival of Covenants. This Agreement and all covenants, agreements, representations and warranties made herein and in any certificates delivered pursuant hereto shall survive the making of the Loans and the execution and delivery of the Note and, subject to the provisions of 10.15 hereof, shall continue in full force and effect until all of the Obligations have been fully paid, performed, satisfied and discharged.
- 10.5 Counterparts; Effectiveness. This Agreement may be executed in any number of counterparts and by the different parties on separate counterparts. Each such counterpart shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. This Agreement shall be deemed to have been executed and delivered when the Bank has received counterparts hereof executed by all parties listed on the signature page(s) hereto.
- 10.6 Headings. The headings of sections have been included herein for convenience only and shall not be considered in interpreting this Agreement.
- 10.7 Payment Due On A Day Other Than A Business Day. If any payment due or action to be taken under this Agreement or any Loan Document falls due or is required to be taken on a day which is not a Business Day, such payment or action shall be made or taken on the next succeeding Business Day and such extended time shall be included in the computation of interest.
- 10.8 Arbitration. Upon demand of any party hereto, whether made before or after institution of any judicial proceeding, any dispute, claim or controversy arising out of, connected with or relating to this Agreement and other Loan Documents ("Disputes") between or among parties to this Agreement shall be resolved by binding arbitration as provided herein. Institution of a judicial proceeding by a party does not waive the right of that party to demand arbitration hereunder. Disputes may include, without limitation, tort claims, counterclaims, disputes as to whether a matter is subject to arbitration, claims brought as class actions, claims arising from Loan Documents executed in the future, or claims arising out of or connected with the transaction reflected by this Agreement.

Arbitration shall be conducted under and governed by the Commercial Financial Disputes Arbitration Rules (the "Arbitration Rules") of the American Arbitration Association (the "AAA") and Title 9 of the U.S. Code. All arbitration hearings shall be conducted in Philadelphia, Pennsylvania. The expedited procedures set forth in Rule 51 et seq. of the Arbitration Rules shall be applicable to claims of less than \$1,000,000.00. All applicable statutes of limitation shall apply to any Dispute. A judgment upon the award may be entered in any court having jurisdiction. The panel from which all arbitrators are selected shall be comprised of licensed attorneys. The single arbitrator selected for expedited procedure shall be a retired judge from

the highest court of general jurisdiction, state or federal, of the state where the hearing will be conducted or if such person is not available to serve, the single arbitrator may be a licensed attorney. Notwithstanding the foregoing, this arbitration provision does not apply to disputes under or related to swap agreements.

10.9 Preservation and Limitation of Remedies. Notwithstanding the preceding binding arbitration provisions, Bank and Borrower agree to preserve, without diminution, certain remedies that any party hereto may employ or exercise freely, independently or in connection with an arbitration proceeding or after an arbitration action is brought. Bank and Borrower shall have the right to proceed in any court of proper jurisdiction or by self-help to exercise or prosecute the following remedies, as applicable: (i) all rights to foreclose against any real or personal property or other security by exercising a power of sale granted under Loan Documents or under applicable law or by judicial foreclosure and sale, including a proceeding to confirm the sale; (ii) all rights of self-help including peaceful occupation of real property and collection of rents, set-off, and peaceful possession of personal property; (iii) obtaining provisional or ancillary remedies including injunctive relief, sequestration, garnishment, attachment, appointment of receiver and filing an involuntary bankruptcy proceeding; and (iv) when applicable, a judgment by confession of judgment. Preservation of these remedies does not limit the power of an arbitrator to grant similar remedies that may be requested by a party in a Dispute.

Borrower and Bank agree that they shall not have a remedy of punitive or exemplary damages against the other in any Dispute and hereby waive any right or claim to punitive or exemplary damages they have now or which may arise in the future in connection with any Dispute whether the Dispute is resolved by arbitration or judicially.

- 10.10 Governing Law. This Agreement shall be construed in accordance with and governed by the internal laws of the Commonwealth of Pennsylvania.
- 10.11 Integration. This Agreement and the other Loan Documents constitute the sole agreement of the parties with respect to the subject matter hereof and thereof and supersede all oral negotiations and prior writings with respect to the subject matter hereof and thereof.
- 10.12 Amendment and Waiver. No amendment of this Agreement, and no waiver of any one or more of the provisions hereof shall be effective unless set forth in writing and signed by the parties hereto.

10.13 Successors and Assigns.

- (a) Generally. This Agreement (i) shall be binding upon the Borrower and the Bank and their respective successors and assigns, and (ii) shall inure to the benefit of the Borrower and the Bank and their respective successors and assigns, provided, however, that the Borrower may not assign its rights hereunder or any interest herein without the prior written consent of the Bank, and any such assignment or attempted assignment by the Borrower shall be void and of no effect with respect to the Bank.
- (b) Participations. The Bank may from time to time sell or otherwise grant participations in the Loans and the Note, provided that the Bank remains sole agent with respect to the Loans and the Note, and the holder of any such participation, if

the participation agreement so provides, (i) shall, with respect to its participation, be entitled to all of the rights of the Bank and (ii) may exercise any and all rights of setoff or banker's lien with respect thereto, in each case as fully as though the Borrower were directly indebted to the holder of such participation in the amount of such participation. The Bank may disclose to prospective participants such information regarding the Borrower's affairs as the Bank possesses. The Bank shall give notice to the Borrower of the grant of such participations; however, the failure to give such notice shall not affect any of the Bank's rights hereunder.

- 10.14 Severability of Provisions. Any provision in this Agreement that is held to be inoperative, unenforceable, voidable, or invalid in any jurisdiction shall, as to that jurisdiction, be ineffective, unenforceable, void or invalid without affecting the remaining provisions, and to this end the provisions of this Agreement are declared to be severable.
- 10.15 Consent to Jurisdiction and Service of Process. The Borrower irrevocably appoints each and every officer of the Borrower as its attorneys upon whom may be served, by regular or certified mail at the address set forth in Section 10.2 hereof, any notice, process or pleading in any action or proceeding against it arising out of or in connection with this Agreement or any of the other Loan Documents; and the Borrower hereby (i) consents that any action or proceeding against it be commenced and maintained in any court within the Commonwealth of Pennsylvania or in the United States District Court for the Eastern District of Pennsylvania by service of process on any such officer; (ii) agrees that the courts of the Commonwealth of Pennsylvania and the United States District Court for the Eastern District of Pennsylvania shall have jurisdiction with respect to the subject matter hereof and the person of the Borrower and the Collateral, and (iii) waives any objection that such Borrower may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum. Notwithstanding the foregoing, the Bank, in its absolute discretion may also initiate proceedings in the courts of any other jurisdiction in which the Borrower may be found or in which any of its properties or the Collateral may be located.

10.16 Indemnification.

- (a) If, after receipt of any payment of all or any part of the Obligations, the Bank is compelled to surrender such payment to any Person or entity for any reason (including, without limitation, a determination that such payment is void or voidable as a preference or fraudulent conveyance, an impermissible setoff, or a diversion of trust funds), then this Agreement and the other Loan Documents shall continue in full force and effect, and the Borrower shall be liable for, and shall indemnify, defend and hold harmless the Bank with respect to the full amount so surrendered.
- (b) The Borrower shall indemnify, defend and hold harmless the Bank with respect to any and all claims, expenses, demands, losses, costs, fines or liabilities of any kind, including reasonable attorneys' fees and costs, arising from or in any way related to (i) acts or conduct of the Borrower under, pursuant to or related to this Agreement and the other Loan Documents, (ii) Borrower's breach or violation of any representation, warranty, covenant or undertaking contained in this Agreement or the other Loan Documents, and (iii) Borrower's failure to comply with any or all laws, statutes, ordinances, governmental rules, regulations or standards, whether federal, state, or local, or court or administrative orders or decrees,

including without limitation those resulting from any Hazardous Materials or dangerous environmental condition within, on, from, related to or affecting any real property owned or occupied by the Borrower, unless resulting from the acts or conduct of the Bank constituting gross negligence or willful misconduct.

(c) The provisions of this section shall survive the termination of this Agreement and the other Loan Documents and shall be and remain effective notwithstanding the payment of the Obligations, the cancellation of the Note, the release of any Encumbrance securing the Obligations or any other action which the Bank may have taken in reliance upon its receipt of such payment. Any cancellation of the Note, release of any Encumbrance or other such action shall be deemed to have been conditioned upon any payment of the Obligations having become final and irrevocable.

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed by their duly authorized officers on the date first above written.

ENVIRONMENTAL TECTONICS CORPORATION

By:/s/ Duane Deaner
Name: Duane Deaner

Title: Chief Financial Officer

FIRST UNION NATIONAL BANK

By:/s/ Walter Stockhecker Name: Walter Stockhecker Title: Senior Vice President

Schedule 6.16

FINANCIAL COVENANTS

This Schedule is a part of the Revolving Credit Agreement dated March 27, 1997 between First Union National Bank and Environmental Tectonics Corporation.

- A. Current Ratio -- The Borrower shall have at the end of each fiscal quarter a Current Ratio of not less than 1.50 to 1.00.
- B. Leverage Ratio $\mbox{--}$ The Borrower shall have at the end of each fiscal quarter a Leverage Ratio of not more than:
- (i) 1.25 to 1.00 for the fiscal quarters ending May 31, 1997, August 31, 1997 and November 30, 1997; and
- (ii) 1.00 to 1.00 for the quarter ending February 27, 1998 and subsequent quarters.
- C. Funds Flow Coverage Ratio -- The Borrower shall have at the end of each fiscal quarter a Funds Flow Coverage Ratio of not less than 1.10 to 1.00.

"Current Assets" shall mean, at any time, all assets which, in accordance with GAAP, should be classified as current assets of the Borrower.

"Current Liabilities" shall mean, at any time, all liabilities which, in accordance with GAAP, should be classified as current liabilities of the Borrower, plus, if the Line of

Credit Loans do not constitute current liabilities in accordance with GAAP, the Line of Credit Loans, plus the face amount of all issued Letters of Credit.

"Current Ratio" shall mean, at any time, the ratio of Current Assets to Current Liabilities.

"Funds Flow Coverage Ratio" shall mean the sum of (i) Net Income, interest expense, depreciation and amortization less (ii) preferred dividends, unfunded capital expenditures, software development costs and non-cash income (to the extent included in Net Income) divided by the sum of interest expense, current maturities of long term debt (excluding any and all Line of Credit Loans) and capital leases (calculated in accordance with GAAP) plus twenty percent of the average of the maximum borrowings outstanding under the Revolving Facility Commitment during each of the two most recent quarters. Prior to February 27, 1998, the Funds Flow Coverage Ratio shall be calculated by annualizing all components of the Funds Flow Coverage Ratio shall be calculated on a twelve-month rolling basis.

"Leverage Ratio" shall mean the ratio of Senior Liabilities to Tangible Capital Funds.

"Liabilities" shall mean, at any time, all liabilities which, in accordance with GAAP, shall be classified as liabilities of the Borrower.

"Net Income" shall mean, for any period, the net income of the Borrower, determined in accordance with GAAP, excluding:

- (a) the proceeds of any insurance policy;
- (b) any gain or loss arising from:
- (1) the sale or other disposition of any assets (other than Current Assets);
 - (2) any write-up of assets; or
- (3) the acquisition of outstanding securities representing Indebtedness of the Borrower;
- (c) any amount representing any interest in the undistributed earnings of any Person;
- (d) any earnings, prior to the date of acquisition, of any Person acquired in any manner;
- (e) any earnings of a successor to or transferee of the assets of the Borrower prior to becoming such successor or transferee;
- (f) any deferred credit (or amortization of a deferred credit) arising from the acquisition of any Person; and
- (g) any other item constituting an extraordinary gain or loss under ${\tt GAAP}$.

"Senior Liabilities" shall mean, at any time, all Liabilities less the Subordinated Debt.

"Tangible Assets" shall mean all tangible assets of the Borrower and shall exclude, without limitation, all goodwill, franchises, licenses, patents, trademarks, trade names, copyrights, service marks, and brand names, but shall not exclude software development costs.

"Tangible Capital Funds" shall mean Tangible Assets less Senior Liabilities.

DEBENTURE PURCHASE AGREEMENT

OF

SIRROM CAPITAL CORPORATION

AND

ENVIRONMENTAL TECTONICS CORPORATION

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DEBENTURE PURCHASE AGREEMENT

This DEBENTURE PURCHASE AGREEMENT (the "Agreement") entered into the 27th day of March, 1997, by and between ENVIRONMENTAL TECTONICS CORPORATION, a Pennsylvania corporation (the "Company") and SIRROM CAPITAL CORPORATION, a Tennessee corporation (the "Purchaser").

WITNESSETH:

WHEREAS, the Company desires to obtain additional capital for use in connection with its business through the issue and sale of certain obligations, and Purchaser is willing to purchase such obligations of the Company, on the terms and conditions set forth herein.

NOW, THEREFORE, in mutual consideration of the premises and the respective representations, warranties, covenants and agreements contained herein, the parties agree as follows:

ARTICLE I - SALE AND PURCHASE OF DEBENTURES

Section 1.1 Description of Debentures.

(a) The Company has authorized the issue and sale of \$4,000,000 aggregate principal amount of its 12% Subordinated Debentures due March 27, 2004 (the "Debentures"), to be dated the date of issue, to bear interest from such date at the rate of 12% per annum, payable quarterly by automatic debit on the first day of each February, May, August and November in each year (commencing May 1, 1997) and at maturity and to bear interest on overdue principal (including any overdue required prepayment of principal or optional prepayment of principal pursuant to Section 5.24) and premium, if any, and (to the extent legally enforceable) on any overdue installment of interest at the rate of 13% per annum after maturity, whether by acceleration or otherwise, until paid, to be expressed to mature on March 27, 2004, and to be substantially in the form attached hereto as Exhibit A-1. Interest on the Debentures shall be computed on the basis of a 360-day year of twelve 30-day months. The Debentures are not subject to prepayment or redemption at the option of the Company prior to their expressed maturity dates except on the terms and conditions and in the amounts and with the premium, if any, set forth in Section 5.24 of this Agreement. The term "Debentures" as used herein shall include each Debenture delivered pursuant to this Agreement. The terms which are capitalized herein shall have the meanings set forth in Section

10 hereof unless the context shall otherwise require.

(b) Simultaneously with the purchase and sale of the Debentures, the Company shall grant, issue, and deliver to Purchaser its Stock Purchase Warrant, dated the date hereof and substantially in the form attached hereto as Exhibit A-2 (the "Warrant").

Section 1.2 Commitment; Closing Date.

Subject to the terms and conditions hereof and on the basis of the representations and warranties hereinafter set forth, the Company agrees to issue and sell to Purchaser, and Purchaser agrees to purchase from the Company, Debentures in the aggregated principal amount of \$4,000,000 at a price of 100% of the principal amount thereof.

Delivery of the Debentures will be made at the offices of Sherrard & Roe, PLC, 424 Church Street, Suite 2000, Nashville, Tennessee 37219, against payment therefor by federal funds wire transfer in immediately available funds and to the accounts and in the amounts in accordance with the Company's wire instructions set forth on Exhibit B hereto, at 10:00 A.M., Nashville time, on March 27, 1997, or such later date as the Company and Purchaser shall agree (the "Closing Date"). The Debentures delivered to Purchaser on the Closing Date will be delivered to Purchaser in the form of a single registered Debenture for the full amount of such purchase (unless different denominations are specified by Purchaser), registered in Purchaser's name or in the name of such nominee as Purchaser may specify and, with appropriate insertions, in the form attached hereto as Exhibit A, all as Purchaser may specify at least 24 hours prior to the date fixed for delivery.

Section 1.3 Processing Fee.

The Company agrees to pay to Purchaser on or before the Closing Date a processing fee in an amount equal to \$80,000.

ARTICLE II - REPRESENTATIONS AND WARRANTIES OF THE COMPANY

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Section 2.1 Corporate Status.

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania and has the corporate power to own and operate its properties, to carry on its business as now conducted and to enter into and to perform its obligations under this Agreement, the Debentures, the Preferred Stock Purchase Agreement, the Warrant, the Registration Rights Agreement, the Subordination Agreement between First Union National Bank, the Company, and Purchaser, and any other document executed and delivered by Purchaser in connection herewith or therewith (collectively, the "Operative Documents"). The Company is qualified to do business and is in good standing in each state or other jurisdiction in which such qualification is necessary under applicable provisions of law, except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the Company. The states or other jurisdictions in which the Company is so qualified are set forth on Schedule 2.1(a) hereto. A certified charter of the Company and a good standing certificate for each state in which it is qualified to do business are attached to Schedule 2.1(a).

each corporation, partnership, joint venture, limited liability company or other business organization in which the Company owns, directly or indirectly, any capital stock or other equity interest (the "Subsidiary" or, collectively, the "Subsidiaries"), or with respect to which the Company or any Subsidiary, alone or in combination with others, is in a control position, which list shows the jurisdiction of incorporation or other organization and the percentage of stock or other equity interest of each Subsidiary owned by the Company. Each Subsidiary is duly organized, validly existing and in good standing under the laws of the jurisdiction of incorporation or other organization as indicated on Schedule 2.1(b), each has all requisite power and authority and holds all material licenses, permits and other required authorizations from government authorities necessary to own its properties and assets and to conduct its business as it is now being conducted, and is qualified to do business as a foreign corporation (or business organization) and is in good standing in every jurisdiction in which such qualification is necessary under applicable provisions of law, except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the Company. All of the outstanding shares of capital stock, or other equity interest, of each Subsidiary owned, directly or indirectly, by the Company have been validly issued, are fully paid and nonassessable, and are owned by the Company free and clear of all liens, charges, security interests or encumbrances. A certified charter for each Subsidiary and good standing certificates for each of the states in which each Subsidiary is qualified to do business are attached to Schedule 2.1(b).

(c) Schedule 2.1(c) sets forth a complete list of "affiliates," as that term is defined in Rule 405 of Regulation C adopted under the Securities Act of 1933, as amended (the "Securities Act"), with a brief statement describing the basis of each affiliation.

Section 2.2 Capitalization.

- (a) The authorized capital stock of the Company consists of (i) 10,000,000 shares of common stock, par value \$.10 per share (the "Common Stock"), of which 2,962,784 shares are issued and outstanding, and (ii) 1,000,000 shares of undesignated preferred stock, with rights and preferences fixed by the Board of Directors in accordance with the corporate laws of the Commonwealth of Pennsylvania and the Company's Articles of Incorporation, none of which are outstanding. All shares of Common Stock outstanding have been validly issued and are fully paid and nonassessable. There are no statutory or contractual pre-emptive rights, rights of first refusal, antidilution rights or any similar rights held by any party with respect to the issuance of the Debentures. The offer, sale and issuance of the Debentures do not require registration under the Securities Act or any applicable state securities laws.
- (b) The Company has not granted, or agreed to grant or issue, any options, warrants or rights to purchase or acquire from the Company any shares of capital stock of the Company, and there are no contracts, commitments, agreements, understandings, arrangements or restrictions as to which the Company is a party, or by which it is bound, relating to any shares of capital stock or other securities of the Company, whether or not outstanding except for (i) the Debentures to be issued pursuant to this Agreement, (ii) 314,164 shares of Common Stock reserved for issuance pursuant to the Company's 1988 Stock Option Plan, for which options to purchase 99,010 shares are outstanding, (iii) a warrant to acquire 100,000 shares of Common Stock held by Chase Manhattan Capital Corporation, and (iv) the obligation to issue to Osprey Partners, in certain circumstances,

a warrant to purchase 125,000 shares of Common Stock. Schedule 2.2 sets forth a summary of such options, warrants and other rights to acquire capital stock of the Company.

Section 2.3 Authorization.

The Company has full legal right, power and authority to enter into and perform its obligations under this Agreement and any of the other Operative Documents, without the consent or approval of any other person, firm, governmental agency or other legal entity. The execution and delivery of this Agreement, the issuance of the Debentures hereunder, the execution and delivery of each other document in connection herewith or therewith to which the Company is a party, and the performance by the Company of its obligations hereunder and/or thereunder are within the corporate powers of the Company and have been duly authorized by all necessary corporate action properly taken, and have received all necessary governmental approvals, if any were required. The consummation of the transactions contemplated by this Agreement and the fulfillment of the terms hereof do not and will not contravene or conflict with the Articles of Incorporation or Bylaws of the Company or any material agreement to which the Company or any of its Subsidiaries is now a party or by which any of them or their properties is bound, or constitute a default thereunder; or results in the creation or imposition of any lien, charge, security interest, or encumbrance of any nature upon any of the property or assets of the Company or any of its Subsidiaries pursuant to the terms of any such agreement or instrument; or violates any provision of law or any applicable judgment, ordinance, regulation or order of any court or governmental agency. The officer(s) executing this Agreement, the Debentures and any other document executed and delivered by Purchaser in connection herewith or therewith, is duly authorized to act on behalf of the Company.

Section 2.4 Validity and Binding Effect.

Each of the Operative Documents is the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency or other matters affecting the rights of creditors generally and general principles of equity.

Section 2.5 Other Transactions.

Except as disclosed on Schedule 2.5, there are no outstanding loans, liens, pledges, security interests, agreements or other financings upon which the Company or any Subsidiary is obligated or by which the Company is bound. Consummation of the transactions hereby contemplated and the performance of the obligations of the Company under and by virtue of the Operative Documents will not result in any breach of, or constitute a default under, any material mortgage, security deed or agreement, deed of trust, lease, bank loan or credit agreement, or any corporate articles, certificate or bylaws, agreement or certificate of limited partnership, partnership agreement, limited liability company agreement, license, franchise or any other material instrument or agreement to which the Company is a party or by which the Company or its properties may be bound or, to the knowledge of the Company, affected or to which the Company has not obtained an effective waiver.

Section 2.6 Litigation.

Except as set forth on Schedule 2.6, there is no litigation, arbitration, claim, proceeding or investigation pending or threatened in writing which the Company or any

Subsidiary is a party or to which any of its respective properties or assets is the subject which, if determined adversely to the Company or such Subsidiary, would individually or in the aggregate have a material adverse effect on the financial position, results of operations or business of the Company and its Subsidiaries, taken as a whole.

Section 2.7 Financial Statements.

The consolidated financial statements of the Company and its Subsidiaries for the fiscal years ended February 25, 1994, February 24, 1995, and February 23, 1996, and the unaudited consolidated financial statements as of the nine (9) months ended November 29, 1996, which the Company previously has delivered to Purchaser, fairly present the financial condition of the Company and its Subsidiaries, as at the respective dates of and for the periods referred to in such financial statements and have been prepared in accordance with generally accepted accounting principles ("GAAP") consistently followed throughout the periods involved. The consolidated balance sheets and the related notes fairly present the financial condition of the Company and its consolidated Subsidiaries as of the respective dates thereof, and the consolidated statements of income, cash flows and changes in stockholders' equity and the related notes fairly present the results of operations of the Company and its consolidated Subsidiaries for the respective periods indicated. There has been no material adverse change in the financial condition of the Company and its Subsidiaries taken as a whole since November 29, 1996.

Section 2.8 SEC Reports.

The Company's Common Stock is listed on the American Stock Exchange and has been duly registered with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Since February 26, 1993, the Company has filed all reports, registrations, proxy or information statements and all other documents, together with any amendments required to be made thereto, required to be filed with the SEC under the Securities Act and the Exchange Act (collectively, the "SEC Reports"). All SEC Reports since February 26, 1995, have been timely filed. The Company previously has furnished to Purchaser true copies of all the SEC Reports, together with all exhibits thereto that Purchaser has requested. As of their respective dates, the SEC Reports complied (or will comply, as the case may be) in all material respects with all rules and regulations promulgated by the SEC and did not (or will not, as the case may be) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

Section 2.9 Absence of Changes.

Since November 29, 1996, (i) neither the Company nor any of its Subsidiaries have incurred any liabilities or obligations, direct or contingent, or entered into any transactions, not in the ordinary course business, that are material to the Company, (ii) neither the Company nor any of its Subsidiaries have purchased any of its outstanding capital stock or declared, paid or otherwise made any dividend or distribution of any kind on its capital stock, (iii) there has not been any change in the capital stock, long-term debt or short-term debt of the Company, and (iv) there has not been any material adverse change, or any development involving a prospective material adverse change, in or affecting the condition (financial or otherwise), results of operations, business or prospects of the

Company or any Subsidiary, taken as a whole.

Section 2.10 No Defaults.

Except as set forth on Schedule 2.10 and except where a default or event of default does not and would not constitute a Material Adverse Event, no default or event of default by the Company or any Subsidiary exists under this Agreement or any of the other Operative Documents, or under any other instrument or agreement to which the Company or any Subsidiary is a party or by which the Company or any Subsidiary or its respective properties may be bound or, to the knowledge of the Company, affected, and no event has occurred and is continuing that with notice or the passage of time or both would constitute a default or event of default thereunder.

Section 2.11 Compliance With Law.

To the Company's knowledge, the Company and any Subsidiary are in compliance with all laws, regulations, decrees and orders applicable to them (including but not limited to the Foreign Corrupt Practices Act, laws, regulations, decrees and orders relating to environmental, occupational and health standards and controls, antitrust, monopoly, restraint of trade or unfair competition) to the extent that noncompliance, in the aggregate, cannot reasonably be expected to cause a Material Adverse Event.

Section 2.12 Taxes.

Except as set forth on Schedule 2.12, the Company and its Subsidiaries have filed or caused to be filed all federal, state and local income, excise and franchise tax returns required to be filed (except for returns that have been appropriately extended), and has paid, or provided for the payment of, all taxes shown to be due and payable on said returns and all other taxes, impositions, assessments, fees or other charges imposed on it by any governmental authority, agency or instrumentality, prior to any delinquency with respect thereto (other than taxes, impositions, assessments, fees and charges currently being contested in good faith by appropriate proceedings, for which appropriate amounts have been reserved), and the Company does not know of any proposed assessment for additional taxes or any basis therefor. No tax liens have been filed against the Company or any of its properties. The Company's federal income tax liability has been finally determined by the Internal Revenue Service and satisfied for all taxable years up to and including the taxable year ended February 24, 1995, or closed by applicable statutes of limitation.

Section 2.13 Certain Transactions.

Except as set forth on Schedule 2.13(i) and except as to indebtedness incurred in the ordinary course of business and approved by the Board of Directors of the Company, neither the Company nor any Subsidiary is indebted, directly or indirectly, to any of its officers or directors, or to their respective spouses or children, in excess of an aggregate amount of \$60,000, and none of the officers or directors or any members of their immediate families are indebted to the Company or any Subsidiary in excess of an aggregate amount of \$60,000 or have any direct or indirect ownership interest in any firm or corporation with which the Company or any Subsidiary is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company or any Subsidiary, except that officers and/or directors of the Company may own no more than 4.9% of the outstanding stock of any publicly traded company which competes directly with the Company. Except as set forth on Schedule 2.13(ii), no officer or director of the Company or any Subsidiary or any member of their immediate families is, directly or indirectly, interested in any material contract with the Company or any Subsidiary. Except as set forth on Schedule 2.13(iii), neither the Company nor any Subsidiary is a guarantor or indemnitor of any indebtedness of any other person, firm or corporation.

Section 2.14 Title to Property.

The Company and each Subsidiary has good and marketable title to all of real and material personal property owned by it, free and clear of all liens, security interests, pledges, encumbrances, equities claims and restrictions of every kind and nature whatsoever, except as disclosed on Schedule 2.14 and except for such liens, security interests, pledges, encumbrances, equities claims and restrictions which are not in the aggregate material to the business, operations or financial condition of the Company and its Subsidiaries taken as a whole. Any real property and buildings held under lease by the Company or any Subsidiary are held under valid existing and enforceable leases, except as disclosed on Schedule 2.14 or which are not material and do not interfere with the use to be made of such buildings or property by the Company.

Section 2.15 Intellectual Property.

Except as set forth in Schedule 2.15, the Company is the lawful owner or has a valid right to use the proprietary information used in its business free and clear of any claim, right, trademark, patent or copyright protection of any third party. As used herein, "proprietary information" includes without limitation (i) any computer software and related documentation, inventions, technical and nontechnical data related thereto, and (ii) other documentation, inventions and data related to patterns, plans, methods, techniques, drawings, finances, customer lists, suppliers, products, special pricing and cost information, designs, processes, procedures, formulas, research data owned or used by the Company or any Subsidiary or marketing studies conducted by the Company, all of which the Company considers to be commercially important and competitively sensitive and which generally has not been disclosed to third parties other than customers in the ordinary course of business. Except as set forth in Schedule 2.15, the Company has good and marketable title to or has a valid right to use all patents, trademarks, trade names, service marks, copyrights or other intangible property rights, and registrations or applications for registration thereof, owned by the Company or any Subsidiary or used or required by the Company or any Subsidiary in the operation of its business as presently being conducted. The Company has no knowledge of any infringements or conflict with asserted rights of others with respect to copyrights, patents, trademarks, service marks, trade names, trade secrets or other intangible property rights or know-how which could cause a Material Adverse Event. To the Company's knowledge, no products or processes of the Company infringe or conflict with any rights of patent or copyright, or any discovery, invention product or process, that is the subject of a patent or copyright application or registration known to the Company. The Company has adopted and follows such procedures as the Company deems necessary or appropriate to provide reasonable protection of the Company's trade secrets and proprietary rights in intellectual property of all kinds. To the knowledge of the Company, no person employed by or affiliated with the Company has employed or proposes to employ any trade secret or any information or documentation proprietary to any former employer, and to the knowledge of the Company, no person employed by or affiliated with the Company has violated any confidential relationship that such person may have

had with any third person, in connection with the development, manufacture or sale of any product or proposed product or the development or sale of any service or proposed service of the Company.

Section 2.16 Accounting Matters.

The Company and each of its Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain assets accountability for the assets of the Company and each of its Subsidiaries; (iii) access to the assets of the Company and each of its Subsidiaries are permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets of the Company and each of its Subsidiaries are compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

Section 2.17 Distributions to Company.

No Subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distributions on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary or from transferring any of such Subsidiary's property or assets to the Company or any other Subsidiary of the Company.

Section 2.18 Prior Sales.

All offers and sales of the Company's capital stock prior to the date hereof were at all relevant times (i) exempt from the registration requirements of the Securities Act or were registered under the Securities Act; and (ii) were duly registered, and were the subject of an available exemption from the requirements of all applicable state securities or Blue Sky laws or met the requirements of such laws.

Section 2.19 Regulatory Compliance.

Except as set forth on Schedule 2.19, the conduct of the business of the Company is not (and is not intended to be, as hereinafter conducted) dependent on any license, permit or other authorization of any federal, state or local regulatory body, and except as set forth on Schedule 2.19, such business is not subject to the regulation of any federal, state or local government regulatory body by reason of the nature of the business being conducted. All licenses, permits and authorizations set forth on Schedule 2.19 are in full force and effect.

Section 2.20 1940 Act Compliance.

The Company is an "eligible portfolio company" as such term is defined in Section $2(a)\,(46)$ of the Investment Company Act of 1940, as amended (the "Investment Company Act"), and the issuance and sale by the Company of the Debentures does not constitute a "public offering" as such term is used in Section $55(a)\,(1)$ thereof.

Section 2.21 Registration Rights.

Except as described in Schedule 2.21, the Company is not under any obligation to register under the Securities Act or

the Trust Indenture Act of 1939, as amended, any of its presently outstanding securities or any of its securities that may subsequently be issued.

Section 2.22 Environment.

The Company has duly complied, in all material respects, with, and its business, operations, assets, equipment, property, leaseholds or other facilities are in compliance, in all material respects, with, the provisions of all federal, state and local environmental, health, and safety laws, codes and ordinances, and all rules and regulations promulgated thereunder. The Company has been issued and will maintain all required federal, state and local permits, licenses, certificates and approvals relating to (1) air emissions; (2) discharges to surface water or groundwater; (3) noise emissions; (4) solid or liquid waste disposal; (5) the use, generation, storage, transportation or disposal of toxic or hazardous substances or wastes (which shall include any and all such materials listed in any federal, state or local law, code or ordinance and all rules and regulations promulgated thereunder as hazardous or potentially hazardous); or (6) other environmental, health or safety matters. The Company has not received notice of, or knows of, or suspects facts which might constitute any violations of any federal, state or local environmental, health or safety laws, codes or ordinances, and any rules or regulations promulgated thereunder with respect to its businesses, operations, assets, equipment, property, leaseholds, or other facilities. Except in accordance with a valid governmental permit, license, certificate or approval, there has been no emission, spill, release or discharge into or upon (1) the air; (2) soils, or any improvements located thereon; (3) surface water or groundwater; or (4) the sewer, septic system or waste treatment, storage or disposal system servicing the premises, of any toxic or hazardous substances or wastes at or from the premises. There has been no complaint, order, directive, claim, citation or notice by any governmental authority or any person or entity with respect to (1) air emissions; (2) spills, releases or discharges to soils or improvements located thereon, surface water, groundwater or the sewer, septic system or waste treatment, storage or disposal systems servicing the premises; (3) noise emissions; (4) solid or liquid waste disposal; (5) the use, generation, storage, transportation or disposal of toxic or hazardous substances or waste; or (6) other environmental, health or safety matters affecting the Company or its business, operations, assets, equipment, property, leaseholds or other facilities. The Company does not have any indebtedness, obligation or liability (absolute or contingent, matured or not matured), with respect to the storage, treatment, cleanup or disposal of any solid wastes, hazardous wastes or other toxic or hazardous substances (including without limitation any such indebtedness, obligation, or liability with respect to any current regulation, law or statute regarding such storage, treatment, cleanup or disposal).

Section 2.23 Insurance.

The Company has maintained, and has caused each Subsidiary to maintain, insurance coverage by financially sound and reputable insurers with respect to their respective properties and business in such forms and amounts and against such risks, casualties and contingencies as are customary for corporations of established reputation engaged in the same or a similar business and owning and operating similar properties.

Section 2.24 Governmental Consents.

No consent, approval, qualification, order or authorization of, or filing with, any local, state, or federal

governmental authority is required on the part of the Company in connection with the Company's valid execution, delivery, or performance of this Agreement or the offer, sale or issuance of the Debenture by the Company.

Section 2.25 Offering.

Subject in part to the truth and accuracy of Purchaser's representations set forth in this Agreement, the offer, sale and issuance of the Debenture as contemplated by this Agreement are exempt from the registration requirements of the Securities Act, and neither the Company nor any authorized agent acting on is behalf will take any action hereafter that would cause the loss of such exemption.

Section 2.26 Manufacturing Rights.

The Company has not granted rights to manufacture, produce, assemble, license, market, or sell its products to any other person and is not bound by any agreement that affects the Company's exclusive right to develop, manufacture, assemble, distribute, market, or sell its products.

Section 2.27 Employees.

To the best of the Company's knowledge, there is no strike, labor dispute or union organization activities pending or threatened between it and its employees. None of the Company's employees belongs to any union or collective bargaining unit. To the best of its knowledge, the Company has complied in all material respects with all applicable state and federal equal opportunity and other laws related to employment. To the best of the Company's knowledge, no employee of the Company is or will be in violation of any judgment, decree, or order, or any term of any employment contract, patent disclosure agreement, or other contract or agreement relating to the relationship of any such employee with the Company, or any other party because of the nature of the business conducted or presently proposed to be conducted by the Company or to the use by the employee of his or her best efforts with respect to such business. The Company is not a party to or bound by any currently effective employment contract, deferred compensation agreement, bonus plan, incentive plan, profit sharing plan, retirement agreement, or other employee compensation agreement. The Company is not aware that any officer or key employee, or that any group of key employees, intends to terminate their employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. Subject to general principles related to wrongful termination of employees, the employment of each officer and employee of the Company is terminable at the will of the Company.

Section 2.28 Fees/Commissions.

The Company has not agreed to pay any finder's fee, commission, origination fee (except for the processing fee due to Purchaser pursuant to Section 1.3 hereof) or other fee or charge to any person or entity with respect to the transactions contemplated hereunder, except a fee of \$529,981.23 payable to Berwind Financial Group, L.P., and a fee of \$75,000.00 payable to First Union National Bank.

Section 2.29 1940 Act Compliance.

The Company is an "eligible portfolio company" as such term is defined in Section 2(a)(46) of the Investment Company Act of 1940, as amended (the "Investment Company Act"), and the issuance and sale by the Company of the Preferred Stock does not

constitute a "public offering" as such term is used in Section 55(a)(1) thereof.

Section 2.30 ERISA.

Except as disclosed in Schedule 2.30, the Company is in compliance in all material respects with all applicable provisions of Title IV of the Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406, September 2, 1974, 88 Stat. 829, 29 U.S.C.A. Sections 1001 et seq. (1975), as amended from time to time ("ERISA"). Except as disclosed in Schedule 2.30, neither a reportable event nor a prohibited transaction (as defined in ERISA) has occurred and is continuing with respect to any "pension plan" (as such term is defined in ERISA, a "Plan"); no notice of intent to terminate a Plan has been filed nor has any Plan been terminated; no circumstances exist which constitute grounds entitling the Pension Benefit Guaranty Corporation (together with any entity succeeding to or all of its functions, the "PBGC") to institute proceedings to terminate, or appoint a trustee to administer, a Plan, nor has the PBGC instituted any such proceedings; neither the Company nor any commonly controlled entity (as defined in ERISA) has completely or partially withdrawn from a multiemployer plan (as defined in ERISA); The Company and each commonly controlled entity has met its minimum funding requirements under ERISA with respect to all of its Plans and the present fair market value of all Plan property exceeds the present value of all vested benefits under each Plan, as determined on the most recent valuation date of the Plan and in accordance with the provisions of ERISA and the regulations thereunder for calculating the potential liability of The Company or any commonly controlled entity to the PBGC or the Plan under Title IV or ERISA; and neither the Company nor any commonly controlled entity has incurred any liability to the PBGC under ERISA.

Section 2.31 Disclosure.

No representation or warranty given as of the date hereof by the Company contained in this Agreement or any schedule attached hereto or any statement in any document, certificate or other instrument furnished or to be furnished to the Purchaser pursuant hereto, taken as a whole, contains or will (as of the time so furnished) contain any untrue statement of a material fact, or omits or will (as of the time so furnished) omit to state any material fact which is necessary in order to make the statements contained herein or therein not misleading.

Section 2.32 Survival.

The representations and warranties of the Company contained in this Agreement shall survive until this Agreement terminates in accordance with Section 11.5 hereof.

ARTICLE III - REPRESENTATIONS AND WARRANTIES OF PURCHASER

 $$\operatorname{\textsc{The}}$$ Purchaser hereby represents to the Company as follows:

Section 3.1 Authorization.

Purchaser has full legal right, power and authority to enter into and perform its obligations under this Agreement and any other document executed and delivered by Purchaser in connection herewith, without the consent or approval of any other person, firm, governmental agency or other legal entity. The execution and delivery of this Agreement and any other document executed and delivered by Purchaser in connection herewith, and the performance by Purchaser of its obligations hereunder and/or

thereunder are within the corporate powers of Purchaser, have received all necessary governmental approvals, if any were required, and do not and will not contravene or conflict with the Charter or Bylaws of Purchaser. The officer(s) executing this Agreement and any other document executed and delivered by Purchaser in connection herewith, is duly authorized to act on behalf of Purchaser.

Section 3.2 Validity and Binding Effect.

This Agreement and any other document executed and delivered by Purchaser in connection herewith are the legal, valid and binding obligations of the Purchaser, enforceable against it in accordance with their respective terms.

Section 3.3 Purchase for Investment.

Purchaser is a registered investment company under the Investment Company Act. Purchaser is acquiring the Debentures for its own account, for investment, and not with a view to the distribution or resale thereof, in whole or in part, in violation of the Securities Act or any applicable state securities law, and Purchaser has no present intention of selling, negotiating or otherwise disposing of the Debentures; it being understood that Purchaser intends to transfer and assign the Debentures and all Purchaser's rights and obligations under this Agreement to one or more wholly-owned Subsidiaries of Purchaser.

Section 3.4 Survival.

The representations and warranties of the Purchaser contained in this Agreement shall survive until this Agreement terminates in accordance with Section 11.5 hereof.

ARTICLE IV - CONDITIONS PRECEDENT TO THE OBLIGATIONS OF PURCHASER

The obligation of Purchaser to purchase and pay for the Debentures on the Closing Date shall be subject to the fulfillment on or before the Closing Date of each of the following conditions:

Section 4.1 Representations and Warranties.

The representations and warranties of the Company contained in this Agreement and in any Schedule hereto or any document or instrument delivered to Purchaser or its representatives hereunder, shall have been true and correct when made and shall be true and correct as of the Closing Date as if made on such date, except to the extent such representations and warranties expressly relate to a specific date. The Company shall have duly performed all of the covenants and agreements to be performed by it hereunder on or prior to the Closing Date.

Section 4.2 Officer's Certificate.

The Company shall have delivered to Purchaser a certificate, dated the Closing Date, signed by a duly authorized officer of the Company substantially in the form attached hereto as Exhibit C.

Section 4.3 Satisfactory Proceedings.

All proceedings taken in connection with the transactions contemplated by this Agreement, and all documents necessary to the consummation thereof, shall be satisfactory in form and substance to Purchaser and Purchaser's counsel, and the Company shall have delivered to Purchaser a certificate, dated the Closing Date, signed by the Secretary of the Company

substantially in the form attached hereto as Exhibit D.

Section 4.4 Legal Opinion.

Purchaser shall have received the opinion of Stevens & Lee, A Professional Corporation, counsel for the Company, dated the Closing Date, addressed to Purchaser, in form and substance satisfactory to Purchaser, and covering the matters set forth in Exhibit E hereto.

Section 4.5 The Company's Existence and Authority.

The Company shall have delivered to Purchaser the following certificates of public officials, in each case as of a recent date:

- (a) the Articles of Incorporation of the Company, certified by the Secretary of State of Pennsylvania;
- (b) a certificate of existence or good standing of the Company in the State of Pennsylvania and as a foreign corporation in each of the jurisdictions set forth in Schedule 2.1(a);
- (c) the Articles of Association and the equivalent under applicable laws of a certificate of good standing for ETC International Corporation.

Section 4.6 Delivery of Operative Documents.

The Company shall have delivered to Purchaser the following executed documents simultaneously with the execution of this Agreement:

- (a) the Debenture;
- (b) the Warrant;
- $% \left(0\right) =0$ (c) the Registration Rights Agreement between the Company and the Purchaser; and
- (d) the Subordination Agreement between First Union National Bank ("FUNB"), the Company, and the Purchaser,

all of which shall be dated as of March 27, 1997.

Section 4.7 Sale of Preferred Stock.

The closing of the purchase and sale of 25,000 shares of the Company's Series A Convertible Preferred Stock (the "Series A Preferred Stock") shall have occurred simultaneously with the closing hereunder.

Section 4.8 Closing of FUNB Financing.

The closing of the initial borrowing under the Revolving Credit Agreement between the Company and FUNB, dated as of March 27, 1997 (the "FUNB Facility") shall have occurred simultaneously with the closing hereunder.

Section 4.9 Required Consents.

Any consents or approvals required to be obtained from any third party, including any holder of indebtedness or any outstanding security of the Company, and any amendments of agreements which shall be necessary to permit the consummation of the transactions contemplated hereby on the Closing Date, shall have been obtained and all such consents or amendments shall be

satisfactory in form and substance to Purchaser and Purchaser's counsel.

Section 4.10 Waiver of Conditions.

If on the Closing Date the Company fails to tender to Purchaser the Debentures to be issued to Purchaser on such date or if the conditions specified in this Article IV have not been fulfilled, Purchaser may thereupon elect to be relieved of all further obligations under this Agreement. Without limiting the foregoing, if the conditions specified in this Article IV have not been fulfilled, Purchaser may waive compliance by the Company with any such condition to such extent as Purchaser, in Purchaser's sole discretion, may determine. Nothing in this Section 4.7 shall operate to relieve the Company of any of its obligations hereunder or to waive any of Purchaser's rights against the Company.

ARTICLE V - COVENANTS OF COMPANY

From and after the Closing Date and continuing so long as any amount remains unpaid on any of the Debentures:

Section 5.1 Use of Proceeds.

The Company shall use the proceeds of the Debentures only for the purposes set forth on Schedule 5.1 attached hereto.

Section 5.2 Use of Proceeds from Settlement.

On October 1, 1996, the Thai Trade Arbitration Council rendered a judgment in favor of the Company in connection with a trade dispute with the Royal Thai Air Force ("RTAF"). If the Company completes services to be performed under its contract with RTAF by June 30, 1997, the Company will be entitled to payment of approximately \$450,000 from RTAF. If the Company completes the contract and receives at least \$400,000 of amounts due, the Company may use such amount to prepay the bridge notes made by the Company in favor of (a) William F. Mitchell dated February 7, 1997, in the principal amount of \$300,000, (b) Pete L. Stephens, M.D., dated January 8, 1997, in the principal amount of \$240,000, and (c) Pete L. Stephens Profit-Sharing Plan dated January 8, 1997, in the principal amount of \$60,000 (collectively, the "Bridge Notes"). The Company shall not make any other payments of principal on the Bridge Notes without the prior written consent of Purchaser.

Section 5.3 Payment of Debentures.

The Company shall pay the indebtedness evidenced by the Debentures according to the terms thereof and shall timely pay or perform all of the other obligations of the Company under this Agreement.

Section 5.4 Repurchase of Debenture.

Neither the Company nor any Subsidiary or Affiliate, directly or indirectly, may repurchase or make any offer to repurchase any Debentures unless the offer has been made to repurchase Debentures, pro rata, from all holders of the Debentures at the same time and upon the same terms. In case the Company repurchases or otherwise acquires any Debentures, such Debentures shall immediately thereafter be canceled, and no Debentures shall be issued in substitution therefor. Without limiting the foregoing, upon the purchase or other acquisition of any Debentures by the Company or any Subsidiary or Affiliate, such Debentures shall no longer be outstanding for purposes of any Section of this Agreement relating to the taking by the

holders of the Debentures of any actions with respect hereto, including, without limitation, Sections 7.3 and 8.1.

Section 5.5 Corporate Existence, Etc.

The Company will preserve and keep in force and effect, and will cause each Subsidiary to preserve and keep in force and effect, its corporate existence and good standing in the state of incorporation thereof, its qualification and good standing as a foreign corporation in each jurisdiction where such qualification is required by applicable law except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the Company and its Subsidiaries, taken as a whole, and all licenses and permits necessary to the proper conduct of its business.

Section 5.6 Maintenance, Etc.

The Company will maintain, preserve and keep, and will cause each Subsidiary to maintain, preserve and keep, its properties and assets which are used or useful in the conduct of its business (whether owned in fee or pursuant to a leasehold interest) in good repair and working order and from time to time will make all necessary repairs, replacements, renewals and additions so that at all times the efficiency thereof shall be maintained.

Section 5.7 Nature of Business.

Neither the Company nor any Subsidiary will engage in any business if, as a result, the general nature of the business, taken on a consolidated basis, which would then be engaged in by the Company and its Subsidiaries would be substantially changed from the general nature of the business engaged in by the Company and its Subsidiaries on the date of this Agreement.

Section 5.8 Insurance.

The Company will maintain, and will cause each Subsidiary to maintain, insurance coverage by financially sound and reputable insurers with respect to their respective properties and business in such forms and amounts and against such risks, casualties and contingencies as are customary for corporations of established reputation engaged in the same or a similar business and owning and operating similar properties.

Section 5.9 Taxes, Claims for Labor and Materials.

The Company will promptly pay and discharge, and will cause each Subsidiary promptly to pay and discharge, (i) all lawful taxes, assessments and governmental charges or levies imposed upon the property or business of the Company or such Subsidiary, respectively, (ii) all trade accounts payable in accordance with usual and customary business terms, and (iii) all claims for work, labor or materials, which if unpaid might become a lien or charge upon any property of the Company or such Subsidiary; provided the Company or such Subsidiary shall not be required to pay any such tax, assessment, charge, levy, account payable or claim if (i) the validity, applicability or amount thereof is being contested in good faith by appropriate actions or proceedings which will prevent the forfeiture or sale of any property of the Company or such Subsidiary or any material interference with the use thereof by the Company or such Subsidiary, and (ii) the Company or such Subsidiary shall set aside on its books, reserves deemed by it to be adequate with respect thereto.

Except where failure to do so does not and would not constitute a Material Adverse Event, The Company shall maintain its business operations and property owned or used in connection therewith in compliance with (i) all applicable federal, state and local laws, regulations and ordinances, and such laws, regulations and ordinances of foreign jurisdictions, governing such business operations and the use and ownership of such property, and (ii) all agreements, licenses, franchises, indentures and mortgages to which The Company is a party or by which The Company or any of its properties is bound. Without limiting the foregoing, The Company shall pay all of its indebtedness promptly and substantially in accordance with the terms thereof.

Section 5.11 ERISA Matters.

If the Company has in effect, or hereafter institutes, a pension plan that is subject to the requirements of Title IV of the Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406, September 2, 1974, 88 Stat. 829, 29 U.S.C.A. Section 1001 et seq. (1975), as amended from time to time ("ERISA"), then the following covenants shall be applicable during such period as any such plan (the "Plan") shall be in effect: (i) the Company hereby covenants that throughout the existence of the Plan, the Company's contributions under the Plan will meet the minimum funding standards required by ERISA and the Company will not institute a distress termination of the Plan; and (ii) the Company covenants that it will send to Purchaser a copy of any notice of a reportable event (as defined in ERISA) required by ERISA to be filed with the Labor Department or the Pension Benefit Guaranty Corporation, at the time that such notice is so filed; provided, however, that the current violation of this covenant as described in Schedule 2.30 shall not be a violation of this Section 5.11 so long as such violation is cured within ten (10) days of the date hereof.

Section 5.12 Books and Records; Rights of Inspection.

The Company will keep, and will cause each Subsidiary to keep, proper books of record and account in which full and correct entries will be made of all dealings or transactions of or in relation to the business and affairs of the Company or such Subsidiary, in accordance with generally accepted accounting principles consistently maintained. The Company shall permit a representative of Purchaser to visit any of its properties and inspect its corporate books and financial records, and will discuss its accounts, affairs and finances with a representative of Purchaser, during reasonable business hours, at all such times as Purchaser may reasonably request.

Section 5.13 Reports.

The Company will furnish to Purchaser the following:

- (a) Monthly Statements. Within twenty-five (25) days of the end of each month, beginning the month of April 1997, monthly internal financial reports which at a minimum shall consist of a balance sheet of the Company as of the close of such month and related statements of income and cash flows for the one-month period then ended, as well as any additional financial reports for such period routinely prepared with respect to the Company and the Subsidiaries;
- (b) Quarterly Statements. As soon as available and in any event within 45 days after the end of each quarterly fiscal period (except the last) of each fiscal year, copies of:

- (i) consolidated and consolidating balance sheets of the Company and Subsidiaries as of the close of the three month period then ended, setting forth in comparative form the consolidated figures at the end of the preceding fiscal year,
- (ii) consolidated and consolidating statements of income and retained earnings of the Company and Subsidiaries for the three-month period then ended, setting forth in comparative form the consolidated figures for the corresponding period of the preceding fiscal year, and
- (iii) consolidated and consolidating statements of cash flows of the Company and Subsidiaries for the portion of the fiscal year ending with such three-month period, setting forth in comparative form the consolidated figures for the corresponding period of the preceding fiscal year,
- all in reasonable detail and accompanied by a certificate of an authorized financial officer of Company that such financial statements fairly represent the financial condition and results of operations and cash flows of the Company at and for the periods presented, subject to normal year end adjustment;
- (c) Annual Statements. As soon as available and in any event within 90 days after the close of each fiscal year of the Company, copies of:
 - (i) consolidated and consolidating balance sheets of the Company and Subsidiaries as of the close of such fiscal year, and
 - (ii) consolidated and consolidating statements of income and retained earnings and cash flows of the Company and Subsidiaries for such fiscal year,

in each case setting forth in comparative form the consolidated figures for the preceding fiscal year, all in reasonable detail and accompanied by an unqualified report thereon of a firm of independent public accountants of recognized national standing or a firm reasonably acceptable to the Purchaser;

- (d) Audit Reports. Promptly upon receipt thereof, one copy of each interim or special audit made by independent accountants of the books of the Company or any Subsidiary;
- (e) SEC and Other Reports. Promptly upon their becoming available, one copy of each financial statement, report, notice or proxy statement sent by the Company to stockholders generally and of each periodic or current report, and any registration statement or prospectus filed by the Company or any Subsidiary with any securities exchange or the SEC or any successor agency, and copies of any orders in any proceedings to which the Company or any of its Subsidiaries is a party, issued by any governmental agency, federal or state, having jurisdiction over the Company or any of its Subsidiaries. The Company specifically covenants to timely file each such item required to be filed with the SEC and each state requiring securities laws filings; and
- (f) Requested Information. With reasonable promptness, such other data and information as Purchaser or any such institutional holder may reasonably request.

Section 5.14 Limitations on Debt and Obligations.

Except as to (i) indebtedness existing on the date hereof and reflected on (a) the Company's unaudited balance sheet as of November 29, 1996 and (b) Schedule 2.7, as the same indebtedness may be extended or renewed (but not increased), (ii) the indebtedness incurred pursuant to the Debentures, (iii) accounts payable and other trade payables incurred in the ordinary course of business, and (iv) obligations of the Company pursuant to capitalized leases, (v) the FUNB Facility as extended or renewed, but not to exceed \$11,000,000 in principal amount; neither the Company nor any Subsidiary shall incur additional indebtedness in excess of \$100,000 annually.

Section 5.15 Guaranties.

The Company will not, and will not permit any Subsidiary to, become or be liable in respect of any Guaranty except Guaranties by Company which are limited in amount to a stated maximum dollar exposure and are incurred in compliance with the provisions of this Agreement.

Section 5.16 Limitation on Liens.

Without the prior written consent of Purchaser, the Company will not, and will not permit any Subsidiary to, create or incur, or suffer to be incurred or to exist, any mortgage, pledge, security interest, encumbrance, lien or charge of any kind (collectively, "Liens") on its or their property or assets, whether now owned or hereafter acquired, or upon any income or profits therefrom, or transfer any property for the purpose of subjecting the same to the payment of obligations in priority to the payment of its or their general creditors, or acquire or agree to acquire, or permit any Subsidiary to acquire, any property or assets upon conditional sales agreement or other title retention devices, except those Liens which exist as of the date hereof as set forth on Schedule 2.14, and except:

the liens and security interests created or permitted by the FUNB Credit Facility Operative Documents;

purchase money liens on and security interests in equipment hereafter acquired securing Debt permitted by Paragraph 5.13 of this Agreement, provided that such liens and security interests attach only to the equipment so acquired and do not encumber any other property of the Company or any Subsidiary;

liens for taxes not yet payable or being contested in good faith by appropriate proceedings and for which adequate reserves have been provided on the books of the Company or a Subsidiary;

mechanics', materialmen's, warehousemen's, carriers' or other like liens arising in the ordinary course of business of the Company or any Subsidiary, if any, arising with respect to obligations which are not overdue for a period longer than thirty (30) days or which are being contested in good faith by appropriate proceedings and for which adequate reserves have been provided on the books of the Company or a Subsidiary;

deposits or pledges to secure the performance of bids, tenders, contracts, leases, public or statutory obligations, surety or appeal bonds or other deposits or pledges for purposes of a like general nature or given in the ordinary course of business by the Company or any Subsidiary; and

other encumbrances consisting of zoning restrictions,

easements, restrictions on the use of real property or minor irregularities in the title thereto, which do not arise in connection with the borrowing of, or any obligation for the payment of, money and which, in the aggregate, do not materially detract from the value of the premises or the business, properties or assets of the Company or any Subsidiary.

Section 5.17 Restricted Payments.

For so long as the Debentures are outstanding, the Company will not, except as hereinafter provided:

- (a) declare or pay any dividends, either in cash or property, on any shares of its capital stock of any class except (i) dividends or other distributions payable solely in shares of capital stock of Company, and (ii) that the preferred dividends on the Series A Preferred Stock may be paid provided no Event of Default exists hereunder;
- (b) directly or indirectly, or through any Subsidiary, purchase, redeem or retire any shares of its capital stock of any class or any warrants, rights or options to purchase or acquire any shares of its capital stock (other than in exchange for or out of the net proceeds to the Company from the substantially concurrent issue or sale of other shares of capital stock of the Company or warrants, rights or options to purchase or acquire any shares of its capital stock; provided, however, that the Company (i) may repurchase the warrant for 100,000 shares of Common Stock held by the Chase Manhattan Capital Corporation and (ii) may effect the mandatory repurchase of the Series A Convertible Preferred Stock in accordance with its terms; or
- (c) make any other payment or distribution, either directly or indirectly or through any Subsidiary, in respect of its capital stock.

Section 5.18 Investments.

The Company will not, and will not permit any Subsidiary to, make any Investments outside the ordinary course of business for the Company or any Subsidiary, without the prior written consent of Purchaser, except:

- (a) Investments in direct obligations of the United States of America, or any agency or instrumentality of the United States of America, the payment or guaranty of which constitutes a full faith and credit obligation of the United States of America, in either case maturing in twelve months or less from the date of acquisition thereof;
- (b) Investments in certificates of deposit maturing within one year from the date of origin, issued by First Union National Bank or a bank or trust company organized under the laws of the United States or any state thereof, having capital, surplus and undivided profits aggregating at least \$100,000,000 and whose long-term certificates of deposit are, at the time of acquisition thereof by Company or a Restricted Subsidiary, rated AA or better by Standard & Poor's Corporation or Aa or better by Moody's Investors Service, Inc.;
- (c) loans or advances in the usual and ordinary course of business to officers, directors and employees for expenses (including moving expenses related to a transfer) incidental to carrying on the business of Company or any Subsidiary; and
 - (d) receivables arising from the sale of goods

and services in the ordinary course of business of Company and its Subsidiaries.

 ${\tt Section~5.19~Mergers,~Consolidations~and~Sales~of~Assets.}$

- (a) The Company will not, and will not permit any Subsidiary to (1) consolidate with or be a party to a merger or share exchange with any other corporation or (2) sell, lease or otherwise dispose of all or any substantial part (as defined in paragraph (d) of this Section 5.18) of the assets of Company and its Subsidiaries; provided, however, that:
 - (i) any Subsidiary may merge or consolidate with or into the Company or any Wholly-owned Subsidiary so long as in any merger or consolidation involving the Company, the Company shall be the surviving or continuing corporation;
 - (ii) the Company may consolidate or merger with any other corporation if (A) the Company shall be the surviving or continuing corporation, (B) at the time of such consolidation or merger and after giving effect thereto, no Default or Event of Default shall have occurred and be continuing, and (C) after giving effect to such consolidation or merger the Company would be permitted to incur at least \$1.00 of additional indebtedness under the provisions of Section 5.13; and
 - (iii) any Subsidiary may sell, lease or otherwise dispose of all or any substantial part of its assets to the Company or any Wholly-owned Subsidiary.
- (b) The Company will not permit any Subsidiary to issue or sell any shares of stock of any class (including as "stock" for the purposes of this Section 5.18, any warrants, rights or options to purchase or otherwise acquire stock or other Securities exchangeable for or convertible into stock) of such Subsidiary to any Person other than the Company or a Wholly-owned Subsidiary, except for thepurpose of qualifying directors, or except in satisfaction of the validly pre-existing preemptive rights of minority shareholders in connection with the simultaneous issuance of stock to the Company and/or a Subsidiary whereby the Company and/or such Subsidiary maintain their same proportionate interest in such Subsidiary.
- (c) The Company will not sell, transfer or otherwise dispose of any shares of stock in any Subsidiary (except to qualify directors) or any indebtedness of any Subsidiary, and will not permit any Subsidiary to sell, transfer or otherwise dispose of (except to the Company or a Wholly-owned Subsidiary) any shares of stock or any indebtedness of any other Subsidiary, unless:
 - (1) simultaneously with such sale, transfer or disposition, all shares of stock and all indebtedness of such Subsidiary at the time owned by the Company and by every other Subsidiary shall be sold, transferred or disposed of as an entirety;
 - (2) the Board of Directors of the Company shall have determined, as evidenced by a resolution thereof, that the retention of such stock and indebtedness is no longer in the best interests of the Company;
 - (3) such stock and Indebtedness is sold, transferred or otherwise disposed of to a Person, for a cash consideration and on terms reasonably deemed by the Board of

Directors to be adequate and satisfactory;

- (4) the Subsidiary being disposed of shall not have any continuing investment in the Company or any other Subsidiary not being simultaneously disposed of; and
- (5) such sale or other disposition does not involve a substantial part (as hereinafter defined) of the assets of the Company and its Subsidiaries taken as a whole.
- (d) As used in this Section 5.18, a sale, lease or other disposition of assets shall be deemed to be a "substantial part" of the assets of the Company and its Subsidiaries only if the book value of such assets, when added to the book value of all other assets sold, leased or otherwise disposed of by the Company and its Subsidiaries (other than in the ordinary course of business) during the same twelve month period ending on the date of such sale, lease or other disposition, exceeds 15% of the consolidated net tangible assets of the Company and its Subsidiaries determined as of the end of the immediately preceding fiscal year.

Section 5.20 Transactions with Affiliates.

The Company will not, and will not permit any Subsidiary to, enter into or be a party to any transaction or arrangement with any officer, director or Affiliate (including, without limitation, the purchase from, sale to or exchange of property with, or the rendering of any service by or for, any Affiliate), except in the ordinary course of and pursuant to the reasonable requirements of the Company's or such Subsidiary's business and upon fair and reasonable terms no less favorable to Company or such Subsidiary than would obtain in a comparable arm's-length transaction with a Person other than an Affiliate, in each case as determined in good faith by a majority of the disinterested directors of the Company.

Section 5.21 Notice.

The Company shall promptly upon the discovery thereof give written notice to Purchaser of (i) the occurrence of any default or Event of Default or event which, with the passage of time, would constitute an Event of Default, under this Agreement, (ii) the occurrence of any default or event of default under any other agreement providing for indebtedness of the Company or any Subsidiary or under a capitalized lease obligation, (iii) any actions, suits or proceedings instituted by any Person against the Company or a Subsidiary or materially affecting any of the assets of the Company or any Subsidiary, and (iv) any dispute between the Company or any Subsidiary, on the one hand, and any governmental regulatory body, on the other hand, which dispute might interfere with the normal operations of the Company or any Subsidiary; provided, however, that Purchaser shall not be required by this Agreement to disclose any such information provided in (iii) or (iv) above to any third party other than Purchaser's counsel and except to the extent compelled by law or otherwise authorized by the Company.

Section 5.22 Observer Rights.

For so long as the Debentures shall remain outstanding, provided that no nominee of the initial Purchaser is a director, the Company shall invite one representative of Purchaser to attend, at the Company's expense, all meetings of the Company's Board of Directors and all committees of the Company's Board of Directors in a nonvoting capacity and, in this respect, shall give such representative copies of all notices and meeting agenda in advance of such meetings and shall permit such representative

to review all documents and other materials provided to directors at such meetings. The Company shall also provide Purchaser, in advance, with copies of all actions proposed to be taken by the Board of Directors in lieu of meeting.

Section 5.23 Information.

The Company will furnish to Purchaser such financial data and other information relating to the business of the Company as Purchaser may from time to time reasonably request. In addition to the foregoing, no later than ninety (90) days after the sale of the Debentures, the Company shall furnish Purchaser a certificate, executed by the President of the Company, itemizing the use of proceeds from the Debentures, and the Company shall cooperate with Purchaser in connection with post-closing review.

Section 5.24 Further Assurances.

The Company will take all actions reasonably requested by Purchaser to effect the transactions contemplated by this Agreement and the other Operative Documents.

Section 5.25 Optional Redemptions of Debentures.

The Debentures may not be redeemed, repaid or repurchased by the Company at the option of the Company or any Subsidiary or Affiliate at any time prior to the second anniversary of the date of initial issuance of the Debentures. On and after the second anniversary of the date of initial issuance, the Debentures shall be subject to redemption, at the Company's option, in whole at any time or in part from time to time, provided that in case of each redemption at the Company's option hereunder, the Company will give written notice thereof to each holder of a Debenture to be redeemed not less than fortyfive (45) nor more than seventy-five (75) days prior to the date fixed for such redemption (the "Redemption Date"), in each case specifying the Redemption Date, the aggregate principal amount of the Debentures to be redeemed on such date and the principal amount of Debentures held by such holder to be redeemed on such date. In the case of a redemption of part of the Debentures, such redemption shall be effected pro rata among all holders of Debentures.

ARTICLE VI - SUBORDINATION OF DEBENTURES

Section 6.1 Subordination.

The indebtedness evidenced by the Debentures, including principal and interest, shall be subordinate and junior to the prior payment of the indebtedness of the Company for borrowed money only as set forth in that certain Subordination Agreement dated as of March 27, 1997, between FUNB, the Company, and Purchaser (such indebtedness described therein referred to herein as, the "Senior Indebtedness"), and the indebtedness evidenced by the Debentures shall be senior in right of payment to all other indebtedness of the Company, which is expressly stated to be subordinate or junior in any respect to other indebtedness of the Company, including the Debentures.

ARTICLE VII - EVENTS OF DEFAULT; REMEDIES

Section 7.1 Events of Default.

The occurrence of any one of the following shall constitute an "Event of Default" under this Agreement:

(a) Default shall occur in the payment of

interest on any Debenture when the same shall have become due; or

- (b) Default shall occur in the making of any payment of the principal of any Debenture or the premium, if any, by the Company thereon at the expressed or any accelerated maturity date or at any date fixed by the Company for prepayment; or
- (c) Default shall be made in the payment of the principal of or interest on any indebtedness (other than the Debentures) of the Company or any Subsidiary and such default shall continue beyond the period of grace, if any, allowed with respect thereto; or
- (d) Default or the happening of any event shall occur under any indenture, agreement, or other instrument under which any indebtedness (other than the Debentures) of the Company or any Subsidiary may be issued and such default or event shall continue for a period of time sufficient to permit the acceleration of the maturity of any such indebtedness of the Company or any Subsidiary outstanding thereunder; or
- (e) Default shall occur in the observance or performance of any covenant or agreement contained in Section 5.3 or Sections 5.13 through 5.19 hereof; or
- (f) Default shall occur in the observance or performance of any other provision of this Agreement which is not remedied within thirty (30) days after the earlier of (i) the date on which the Company first obtains knowledge of such Default and (ii) the date on which written notice thereof is given to the Company by the holder of any Debenture; or
- (g) Any representation or warranty made by the Company herein, or made by the Company in any statement or certificate furnished by the Company in connection with the consummation of the issuance and delivery of the Debentures or furnished by the Company pursuant hereto, is untrue in any material respect as of the date of the issuance or making thereof; or
- (h) Final judgment or judgments for the payment of money aggregating in excess of either (i) \$100,000 in the United States, the United Kingdom, Canada, or any other jurisdiction in which the common law applies or (ii) \$500,000 in any other jurisdiction, is or are outstanding against the Company or any Subsidiary or against any property or assets of either and any one of such judgments has remained unpaid, unvacated, unbonded or unstayed by appeal or otherwise for a period of thirty (30) days from the date of its entry; or
- (i) The Company or any Subsidiary becomes insolvent or bankrupt, is generally not paying its debts as they become due or makes an assignment for the benefit of creditors, or the Company or any Subsidiary applies for or consents to the appointment of a custodian, trustee, liquidator, or receiver for the Company or such Subsidiary or for the major part of the property of either; or
- (j) A custodian, trustee, liquidator, or receiver is appointed for the Company or any Subsidiary or for the major part of the property of either and is not discharged within sixty (60) days after such appointment; or
- (k) Bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of debtors, are instituted by or against the Company or any Subsidiary and, if

instituted against the company or any Subsidiary, are consented to or are not dismissed within sixty (60) days after such institution.

Section 7.2 Notice to Holders.

When any Event of Default described in the foregoing Section 7.1 has occurred, or if the holder of any Debenture or of any other evidence of indebtedness of the Company gives any notice or takes any other action with respect to a claimed default, the Company agrees to give notice within three (3) Business Days of such event to all holders of the Debentures then outstanding.

Section 7.3 Acceleration of Maturities.

When any Event of Default described in paragraph (a), (b) or (c) of Section 7.1 has happened and is continuing, any holder of any Debenture may, and when any Event of Default described in paragraphs (d) through (i), inclusive, of said Section 7.1 has happened and is continuing the holder or holders of 50% or more of the principal amount of Debentures at the time outstanding may, by notice to the Company, declare the entire principal and all interest accrued on all Debentures to be, and all Debentures shall thereupon become, forthwith due and payable, without any presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived. When any Event of Default described in paragraph (j) or (k) of Section 7.1 has occurred, then all outstanding Debentures shall immediately become due and payable without presentment, demand or notice of any kind. Upon the Debentures becoming due and payable as a result of any Event of Default as aforesaid, the Company will forthwith pay to the holders of the Debentures the entire principal and interest accrued on the Debentures. No course of dealing on the part of any Debentureholder nor any delay or failure on the part of any Debentureholder to exercise any right shall operate as a waiver of such right or otherwise prejudice such holder's rights, powers and remedies. The Company further agrees, to the extent permitted by law, to pay to the holder or holders of the Debentures all costs and expenses , including reasonable attorneys' fees, incurred by them in the collection of any Debentures upon any default hereunder or thereon.

ARTICLE VIII - RESTRICTIONS ON TRANSFER

Section 8.1 Legends; Restrictions on Transfer.

The Debenture has not been registered under the Securities Act nor any state securities laws. Each Debenture issued pursuant to this Agreement shall bear a legend in substantially the following form:

THIS DEBENTURE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR ANY APPLICABLE STATE SECURITIES LAW AND MAY NOT BE TRANSFERRED UNLESS (i) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR SUCH APPLICABLE STATE SECURITIES LAWS, OR (ii) IN THE OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY REGISTRATION UNDER THE SECURITIES ACT OR SUCH APPLICABLE STATE SECURITIES LAWS IS NOT REQUIRED IN CONNECTION WITH SUCH TRANSFER.

The provisions of this Article VIII shall be binding upon all subsequent holders of the Debentures.

Section 8.2 Notice of Intention to Transfer; Opinions of Counsel.

The Debentures shall not be transferable except upon the conditions specified in this Article VIII. Each holder of any Debenture, by acceptance thereof, agrees, prior to any transfer of such Debenture, to give written notice to the Company of such holder's intention to effect such transfer or conversion and briefly describing the manner of the proposed transfer. Such notice of intended transfer shall be accompanied by, if applicable, a copy of the opinion of counsel to such holder reasonably satisfactory to the Company, to the effect that registration under the Securities Act of such Debenture, in connection with such proposed transfer, is not required. If in the opinion of such counsel, the proposed transfer of such Debenture, may be effected without registration of such Debenture, under the Securities Act, such holder shall be entitled to transfer such Debenture in accordance with the terms of the notice delivered by such holder to the Company. The Company will promptly upon such transfer deliver new Debentures not bearing a legend of the character set forth in Section 8.1, unless in the opinion of such counsel subsequent disposition by such holder may require registration under the Securities Act. If the proposed transfer of such Debenture may not be affected without registration of such Debenture under the Securities Act, the holder thereof shall not be entitled to transfer such Debenture in the absence of an effective registration statement.

ARTICLE IX - AMENDMENTS, WAIVERS AND CONSENTS

Section 9.1 Consent Required.

Any term, covenant, agreement or condition of this Agreement may, with the consent of the Company, be amended or compliance therewith may be waived (either generally or in a particular instance and either retroactively or prospectively, if the Company shall have obtained the consent in writing of the holders of at least 50% in aggregate principal amount of outstanding Debentures; provided that without the written consent of the holders of all of the Debentures then outstanding, no such waiver, modification, alteration or amendment shall be effective (a) which will change the time of payment of the principal of or the interest on any Debenture or reduce the principal amount thereof or change the rate of interest thereon, (b) which will change any of the provisions with respect to optional prepayments, or (c) which will change the percentage of holders of the Debentures required to consent to any such amendment, modification or waiver of any of the provisions of this Article VIII or Article VII.

Section 9.2 Solicitation of Debenture Holders.

The Company will not, directly or indirectly, pay or cause to be paid by remuneration, whether by way of supplemental or additional interest, fee or otherwise, to any holder of the Debentures as consideration for or as an inducement to the entering into by any holder of the Debentures of any waiver or amendment of any of the terms and provisions of this Agreement unless such remuneration is concurrently paid, on the same terms, ratably to the holders of all of the Debentures then outstanding.

Section 9.3 Effect of Amendment or Waiver.

Any such amendment or waiver shall apply equally to all of the holders of the Debentures and shall be binding upon them, upon each future holder of any Debenture and upon the Company, whether or not such Debenture shall have been marked to indicate such amendment or waiver. No such amendment or waiver shall extend to or affect any obligation not expressly amended or waived or impair any right consequent thereon.

Section 10.1 Definitions. Unless the context otherwise requires, the terms hereinafter set forth when sued herein shall have the following meanings and the following definitions shall be equally applicable to both the singular and plural forms of any of the terms herein defined:

"Affiliate" shall mean any Person (other than a Restricted Subsidiary) (a) which directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, the Company, (b) which beneficially owns or holds 5% or more of any class of the Voting Stock of the Company or (c) 5% or more of the Voting Stock (or in the case of a Person which is not a corporation, 5% or more of the equity interest) of which is beneficially owned or held by the Company or a Subsidiary. The term "control" means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of Voting Stock, by contract or otherwise.

"Business Day" shall mean any day other than a Saturday, Sunday, or other day on which banks in Tennessee are authorized to close.

"Default" shall mean any event or condition, the occurrence of which would, with the lapse of time or the giving of notice, or both, constitute an Event of Default as defined in Section 7.1.

"ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended and any successor statute of similar import, together with the regulations thereunder, in each case as in effect from time to time. References to sections of ERISA shall be construed to also refer any successor sections.

"Event of Default" shall have the meaning set forth in Section 7.1 hereof.

"Guaranties" by any Person shall mean all obligations (other than endorsements in the ordinary course of business of negotiable instruments for deposit or collection) of such Person quaranteeing, or in effect quaranteeing, any Indebtedness, dividend or other obligation of any other Person (the "primary obligor") in any manner, whether directly or indirectly, including, without limitation, all obligations incurred through an agreement, contingent or otherwise, by such Person: (a) to purchase such Indebtedness or obligation or any property or assets constituting security therefor, (b) to advance or supply funds (i) for the purchase or payment of such Indebtedness or obligation, (ii) to maintain working capital or other balance sheet condition or (iii) otherwise to advance or make available funds for the purchase or payment of such Indebtedness or obligation, or (c) to lease property or to purchase Securities or other property or services primarily for the purpose of assuring the owner of such Indebtedness or obligation of the ability of the primary obligor to make payment of the Indebtedness or obligation, or (d) otherwise to assure the owner of the Indebtedness or obligation of the primary obligor against loss in respect thereof. For the purposes of all computations made under this Agreement, a Guaranty in respect of any Indebtedness for borrowed money shall be deemed to be Indebtedness equal to the principal amount of such Indebtedness for borrowed money which has been guaranteed, and a Guaranty in respect of any other obligation or liability or any dividend shall be deemed to be Indebtedness equal to the maximum aggregate amount of such obligation, liability or dividend.

"Hazardous Substance" shall mean any hazardous or toxic material, substance or waste, pollutant or contaminant which is regulated under any statute, law, ordinance, rule or regulation of any local, state, regional or Federal authority having jurisdiction over the property of the Company and its Subsidiaries or its use, including but not limited to any material, substance or waste which is: (a) defined as a hazardous substance under Section 311 of the Federal Water Pollution Control Act (33 U.S.C. Section 1317.1) as amended; (b) regulated as a hazardous waste under Section 1004 or Section 3001 of the Federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 U.S.C. Section 6901 et seq.) as amended; (c) defined as a hazardous substance under Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. Section 9601 et seq.) as amended; or (d) defined or regulated as a hazardous substance or hazardous waste under any rules or regulations promulgated under any of the foregoing statutes.

"Indebtedness" of any Person shall mean and include all obligations of such Person which in accordance with generally accepted accounting principles shall be classified upon a balance sheet of such Person as liabilities of such Person, and in any event shall include all (a) obligations of such Person for borrowed money or which have been incurred in connection with the acquisition of property or assets, (b) obligations secured by any lien or other charge upon property or assets owned by such Person, even though such Person has not assumed or become liable for the payment of such obligations, (c) obligations created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person, notwithstanding the fact that the rights and remedies of the seller, lender or lessor under such agreement in the Event of Default are limited to repossession or sale or property, (d) capitalized rentals, and (e) Guaranties of obligations of others of the character referred to in this definition.

"Interest Charges" for any period shall mean all interest and all amortization of debt discount and expense on any particular Indebtedness for which such calculations are being made. Computations of Interest Charges on a pro forma basis for Indebtedness having a variable interest rate shall be calculated at the rate in effect on the date of any determination.

"Investments" shall mean all investments, in cash or by delivery of property made, directly or indirectly in any Person, whether by acquisition of shares of capital stock, indebtedness or other obligations or Securities or by loan, advance, capital contribution or otherwise; provided, however that "Investments" shall not mean or include routine investments in property to be used or consumed in the ordinary course of business.

"Long-Term Lease" shall mean any lease of real or personal property (other than a Capitalized Lease) having an original term, including any period for which the lease may be renewed or extended at the option of the lessor, of more than three years.

"Material Adverse Event" shall mean any event or circumstance, or set of events or circumstances, individually or collectively, that reasonably could be expected to result in any (i) adverse effect upon the validity or enforceability of any of the Operative Documents, or (ii) material and adverse effect on the financial condition of the Company as represented to Purchaser herein or in any document delivered to Purchaser in connection herewith, or (iii) default or potential default under any of the Operative Documents.

"Multiemployer Plan" shall have the same meaning as in $\ensuremath{\mathsf{ERISA}}\xspace.$

"Person" shall mean an individual, partnership, corporation, trust or unincorporated organization, and a government or agency or political subdivision thereof.

"Plan" means a "pension plan", as such term is defined in ERISA, established or maintained by the Company or any ERISA Affiliate or as to which the Company or any ERISA Affiliate contributed or is a member or otherwise may have any liability.

"Reportable Event" shall have the same meaning as in $\ensuremath{\mathsf{ERISA}}\xspace.$

"Restricted Investments" shall mean all Investments, other than Investments described in clauses (i) through (iv) of Section 5.17 hereof.

"Security" shall have the same meaning as in Section 2(1) of the Securities Act of 1933, as amended.

"Subsidiary" shall mean, as to any particular parent corporation, any corporation of which more than 50% (by number of votes) of the Voting Stock shall be owned by such parent corporation and/or one or more corporations which are themselves Restricted Subsidiaries of such parent corporation. The term "Subsidiary" shall mean a Subsidiary of the Company.

"Voting Stock" shall mean Securities of any class or classes the holders of which are ordinarily, in the absence of contingencies, entitled to elect a majority of the corporate directors (or Persons performing similar functions).

"Wholly-owned" when used in connection with any Subsidiary shall mean a Subsidiary of which all of the issued and outstanding shares of stock (except shares required as directors' qualifying shares) and all Funded Debt or Current Debt shall be owned by the Company and/or one or more of its Wholly-owned Restricted Subsidiaries.

Section 10.2 Accounting Principles.

Where the character or amount of any asset or liability or item of income or expense is required to be determined or any consolidation or other accounting computation is required to be made for the purposes of this Agreement, the same shall be done in accordance with GAAP, to the extent applicable, except where such principles are inconsistent with the requirements of this Agreement.

Section 10.3 Directly or Indirectly.

Where any provision in this Agreement refers to action to be taken by any Person, or which such Person is prohibited from taking such provision shall be applicable whether the action in question is taken directly or indirectly by such Person.

ARTICLE XI - MISCELLANEOUS

Section 11.1 Expenses, Stamp Tax Indemnity.

Whether or not the transactions herein contemplated shall be consummated, the Company agrees to pay directly all of Purchaser's out-of-pocket expenses in connection with the entering into of this Agreement and the consummation of the transactions contemplated hereby, including but not limited to the reasonable fees, expenses and disbursements of Sherrard &

Roe, PLC, Purchaser's counsel, the entering into of this Agreement and the consummation of duplicating and printing cost and charges for shipping the Debentures, adequately insured to Purchaser at Purchaser's home office or at such other place as Purchaser may designate, and so long as Purchaser hold any of the Debentures, all such expenses relating to any amendments, waivers or consents pursuant to the provisions hereof (whether or not the same are actually executed and delivered), including, without limitation, any amendments, waivers or consents resulting from any work-out, restructuring or similar proceedings relating to the performance by the Company of its obligations under this Agreement and the Debentures. The Company also agrees that it will pay and save Purchaser harmless against any and all liability with respect to stamp and other taxes, if any, which may be payable in connection with the execution and delivery of this Agreement or the Debentures, whether or not any Debentures are then outstanding. The Company agrees to protect and indemnify Purchaser against any liability for any and all brokerage fees and commissions payable or claimed to be payable to any Person in connection with the transactions contemplated by this Agreement.

 $$\operatorname{Section}\ 11.2$$ Powers and Rights Not Waived; Remedies Cumulative.

No delay or failure on the part of the holder of any Debenture in the exercise of any power or right shall operate as a waiver thereof; nor shall any single or partial exercise of the same preclude any other of further exercise thereof, or the exercise of any other power or right, and the rights and remedies of the holder of any Debenture are cumulative to and are not exclusive of any rights or remedies any such holder would otherwise have, and no waiver or consent, given or extended pursuant to Article VIII hereof, shall extend to or affect any obligation or right not expressly waived or consented to.

Section 11.3 Notices.

All communications provided for hereunder shall be in writing and shall be delivered personally, or mailed by registered mail, or by prepaid overnight air courier, or by facsimile communication, in each case addressed:

If to Purchaser: Tandem Capital, Inc.

500 Church Street

Suite 200

Nashville, Tennessee 37219

Fax: (615) 726-1208 Attention: Craig Macnab

with a copy to: Sherrard & Roe, PLC

424 Church Street, Suite 2000

Nashville, TN 37219 Fax: (615) 742-4539

Attention: Donald I.N. McKenzie, Esq.

If to the Company: Environmental Tectonics Corporation

125 James Way

Southampton, PA 18966-3877

Fax: (215) 357-4000

Attention: William F. Mitchell

with a copy to: Stevens & Lee, A Professional

Corporation

One Glenhardie Corporate Center

1275 Drummers Lane

P.O. Box 236

Wayne, PA 19087-1236

Fax: (610) 687-1384
Attention: Jeffrey P. Waldron, Esq.

or such other address as Purchaser or the subsequent holder of any Debenture initially issued to Purchaser may designate to the Company in writing, or such other address as the Company may in writing designate to Purchaser or to a subsequent holder of the Debenture initially issued to Purchaser, provided, however, that a notice sent by overnight air courier shall only be effective if delivered at a street address designated for such purpose by such person and a notice sent by facsimile communication shall only be effective if made by confirmed transmission at a telephone number designated for such purpose by such person or, in either case, as Purchaser or a subsequent holder of any Debentures initially issued to Purchaser may designate to the Company in writing or at a telephone number herein set forth in the case of the Company.

Section 11.4 Successors and Assigns.

This Agreement, the Debentures and the other Operative Documents may be endorsed, assigned and/or transferred in whole or in part by Purchaser, and any such holder and/or assignee of the same shall succeed to and be possessed of the rights and powers of Purchaser under all of the same to the extent transferred and assigned. The Company shall not assign any of its rights nor delegate any of its duties under this Agreement or any of the other Operative Documents by operation of law or otherwise without the prior express written consent of Purchaser, and in the event the Company obtains such consent, this Agreement and the other Operative Documents shall be binding upon such assignee.

All covenants, representations and warranties made by the Company herein and in any certificates delivered pursuant hereto, whether or not in connection with the Closing Date, shall survive the closing and the delivery of this Agreement and the Debentures.

Section 11.6 Severability.

Should any part of this Agreement for any reason be declared invalid or unenforceable, such decision shall not affect the validity of any remaining portion, which remaining portion shall remain in force and effect as if this Agreement had been executed with the invalid or unenforceable portion thereof eliminated and it is hereby declared the intention of the parties hereto that they would have executed the remaining portion of this Agreement without including therein any such part, parts or portion which may for any reason, be hereafter declared invalid or unenforceable.

Section 11.7 Governing Law.

This agreement and the Debentures issued and sold hereunder shall be governed by and construed in accordance with Tennessee law, without regard to its conflict of law rules.

Section 11.8 Captions; Counterparts.

The descriptive headings of the various Sections or parts of this Agreement are for convenience only and shall not affect the meaning or construction of any of the provisions hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

* * *

IN WITNESS WHEREOF, the parties hereto have caused this Debenture Purchase Agreement to be executed and delivered by their duly authorized officers as of the date first written above.

COMPANY: ENVIRONMENTAL TECTONICS

CORPORATION:

By:/s/ Duane Deaner
Duane Deaner
Chief Financial Officer

PURCHASER: SIRROM CAPITAL CORPORATION

By:/s/ Craig Macnab Name: Craig Macnab Title: Vice President

PREFERRED STOCK PURCHASE AGREEMENT

OF

SIRROM CAPITAL CORPORATION

AND

ENVIRONMENTAL TECTONICS CORPORATION

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PREFERRED STOCK PURCHASE AGREEMENT

This PREFERRED STOCK PURCHASE AGREEMENT (the "Agreement") entered into the 27th day of March, 1997, is by and between ENVIRONMENTAL TECTONICS CORPORATION, a Pennsylvania corporation (the "Company") and SIRROM CAPITAL CORPORATION, a Tennessee

WITNESSETH:

WHEREAS, the Company desires to obtain additional capital for use in connection with its business through the issue and sale of certain obligations of the Company, and Purchaser is willing to purchase such obligations of the Company, on the terms and conditions set forth herein.

NOW, THEREFORE, in mutual consideration of the premises and the respective representations, warranties, covenants and agreements contained herein, the parties agree as follows:

ARTICLE I. - SALE AND PURCHASE OF STOCK

Section 1.1. Description of Preferred Stock.

The Company has authorized the issue and sale of 25,000 shares of its Series A Convertible Preferred Stock (the "Preferred Stock") having the rights and preferences set forth in the Company's Statement With Respect to Shares attached as Exhibit A (the "Statement With Respect to Shares") hereto for a purchase price of \$100 per share, or an aggregate purchase price of \$2,500,000.00. The Statement With Respect to Shares shall be filed with the Secretary of State of Pennsylvania on or before the Closing Date (as defined below). The terms which are capitalized herein shall have the meanings set forth in Section 8 hereof unless the context shall otherwise require.

Section 1.2. Commitment; Closing Date.

Subject to the terms and conditions hereof and on the basis of the representations and warranties hereinafter set forth, the Company agrees to issue and sell to Purchaser, and Purchaser agrees to purchase from the Company, 25,000 shares of Preferred Stock for an aggregate purchase price of \$2,500,000.

Delivery of a single certificate representing the Preferred Stock will be made at the offices of Sherrard & Roe, PLC, 424 Church Street, Suite 2000, Nashville, Tennessee 37219, against payment therefor by federal funds wire transfer in immediately available funds and to the accounts and in the amounts in accordance with the Company's wire instructions set forth on Exhibit B hereto, at 10:00 A.M., Nashville time, on March 27, 1997 or such later date as the Company and Purchaser shall agree (the "Closing Date"). The stock certificate to be delivered to Purchaser on the Closing Date will be registered in Purchaser's name or in the name of such nominee as Purchaser may specify at least 24 hours prior to the date fixed for delivery.

Section 1.3. Processing Fee.

The Company agrees to pay to Purchaser on or before the Closing Date a processing fee in an amount equal to \$50,000.

ARTICLE II. - REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants to Purchaser as follows:

Section 2.1. Corporate Status.

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania and has the corporate power to own and operate its properties, to carry on its business as now conducted and to enter into and to perform its obligations under

this Agreement, the Registration Rights Agreement between the Company and Purchaser dated of even date herewith (the "Registration Rights Agreement") and any other document executed and delivered by Purchaser in connection herewith or therewith (collectively, the "Operative Documents"). The Company is qualified to do business and is in good standing in each state or other jurisdiction in which such qualification is necessary under applicable provisions of law; except where the failure to so qualify would not have a material adverse effect on the financial condition or result of operations of the Company. The states or other jurisdictions in which the Company is so qualified are set forth on Schedule 2.1(a) hereto. A certified charter of the Company and a good standing certificate for each state in which it is qualified to do business are attached to Schedule 2.1(a).

- (b) Schedule 2.1(b) sets forth a complete list of each corporation, partnership, joint venture, limited liability company or other business organization in which the Company owns, directly or indirectly, any capital stock or other equity interest (the "Subsidiary" or, collectively, the "Subsidiaries"), or with respect to which the Company or any Subsidiary, alone or in combination with others, is in a control position, which list shows the jurisdiction of incorporation or other organization and the percentage of stock or other equity interest of each Subsidiary owned by the Company. Each Subsidiary is duly organized, validly existing and in good standing under the laws of the jurisdiction of incorporation or other organization as indicated on Schedule 2.1(b), each has all requisite power and authority and holds all material licenses, permits and other required authorizations from government authorities necessary to own its properties and assets and to conduct its business as it is now being conducted, and is qualified to do business as a foreign corporation (or business organization) and is in good standing in every jurisdiction in which such qualification is necessary under applicable provisions of law; except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the company. All of the outstanding shares of capital stock, or other equity interest, of each Subsidiary owned, directly or indirectly, by the Company have been validly issued, are fully paid and nonassessable, and are owned by the Company free and clear of all liens, charges, security interests or encumbrances. A certified charter for each Subsidiary and good standing certificates for each of the states in which each Subsidiary is qualified to do business are attached to Schedule 2.1(b).
- (c) Schedule 2.1(c) sets forth a complete list of "affiliates," of the Company as that term is defined in Rule 405 of Regulation C adopted under the Securities Act of 1933, as amended (the "Securities Act"), with a brief statement describing the basis of each affiliation.

Section 2.2. Capitalization.

(a) The authorized capital stock of the Company consists of (i) 10,000,000 shares of common stock, par value \$.10 per share, of which 2,962,784 shares are issued and outstanding, and (ii) 1,000,000 shares of undesignated preferred stock, with rights and preferences to be fixed by the Board of Directors in accordance with the corporate laws of the Commonwealth of Pennsylvania and the Company's Articles of Incorporation, and of which, as of the Closing, 25,000 shall have been designated as "Series A Convertible Preferred Stock," bearing the rights, preferences and limitations set forth in the Statement With Respect to Shares and none of which are outstanding. All shares of Common Stock outstanding have been validly issued and are fully paid and nonassessable. There are no statutory or contractual pre-emptive rights, rights of first refusal,

antidilution rights or any similar rights held by any party with respect to the issuance of the Preferred Stock. The offer, sale and issuance of the Preferred Stock do not require registration under the Securities Act or any applicable state securities laws.

- (b) The Company has not granted, or agreed to grant or issue, any options, warrants or rights to purchase or acquire from the Company any shares of capital stock of the Company, and there are no securities outstanding which are convertible into or exchangeable for shares of Common Stock, or contracts, commitments, agreements, understandings, arrangements or restrictions as to which the Company is a party, or by which it is bound, relating to any shares of capital stock or other securities of the Company, whether or not outstanding except for (i) the conversion privileges of the Preferred Stock to be issued pursuant to this Agreement, with respect to which 416,666.67 shares of Common Stock have been reserved for issuance upon conversion, (ii) 314,164 shares of Common Stock reserved for issuance pursuant to the Company's 1988 Stock Option Plan, for which options to purchase 99,010 shares are outstanding, (iii) a warrant to acquire 100,000 shares of Common Stock held by Chase Manhattan Capital Corporation, and (iv) the obligation to issue to Osprey Partners, in certain circumstances, a warrant to purchase 125,000 shares of Common Stock. Schedule 2.2 sets forth a summary of such options, warrants and other rights to acquire capital stock of the Company.
- (c) The Preferred Stock that is being purchased by the Purchaser, when issued, sold, and delivered in accordance with the terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and under applicable state and federal securities laws. The Common Stock issuable upon conversion of the Preferred Stock being purchased under this Agreement has been duly and validly reserved for issuance and, upon issuance in accordance with the terms of the Statement With Respect to Shares and this Agreement, will be duly and validly issued, fully paid, and nonassessable and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and under applicable state and federal securities laws.

Section 2.3. Authorization.

The Company has full legal right, power and authority to enter into and perform its obligations under this Agreement and any of the other Operative Documents, without the consent or approval of any other person, firm, governmental agency or other legal entity. The execution and delivery of this Agreement and the Operative Documents, the issuance of the Preferred Stock hereunder, the execution and delivery of each other document in connection herewith or therewith to which the Company is a party, and the performance by the Company of its obligations hereunder and/or thereunder are within the corporate powers of the Company and have been duly authorized by all necessary corporate action properly taken, have received all necessary governmental approvals, if any were required. The consummation of the transactions contemplated by this Agreement and the fulfillment of the terms hereof do not and will not contravene or conflict with the Articles of Incorporation or Bylaws of the Company or any material agreement to which the Company or any of its Subsidiaries is now a party or by which any of them or their properties is bound, or constitute a default thereunder; or results in the creation or imposition of any lien, charge, security interest, or encumbrance of any nature upon any of the property or assets of the Company or any of its Subsidiaries pursuant to the terms of any such agreement or instrument; or

violates any provision of law or any applicable judgment, ordinance, regulation or order of any court or governmental agency. The officer(s) executing this Agreement, the Operative Documents and any other document executed and delivered by Purchaser in connection herewith or therewith, is duly authorized to act on behalf of the Company.

Section 2.4. Validity and Binding Effect.

Each of the Operative Documents is the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

Section 2.5. Contracts and Other Commitments.

Except as disclosed on Schedule 2.5, the Company and its Subsidiaries do not have and are not bound by any contract, agreement, lease, commitment, loans, liens, pledges, security interests upon which the Company or any Subsidiary is obligated or by which the Company is bound other than (i) contracts for the purchase of supplies and services that were entered into in the ordinary course of business and that do not involve more than \$50,000, and do not extend for more than one (1) year beyond the date hereof, (ii) sales contracts entered into in the ordinary course of business, and (iii) contracts terminable at will by the Company on more than thirty (30) days' notice without cost or liability to the Company and that do not involve any employment or consulting arrangement and are not material to the conduct of the Company's business. Consummation of the transactions hereby contemplated and the performance of the obligations of the Company under and by virtue of the Operative Documents will not result in any breach of, or constitute a default under, any material mortgage, security deed or agreement, deed of trust, lease, bank loan or credit agreement, or any corporate articles, certificate or bylaws, agreement or certificate of limited partnership, partnership agreement, limited liability company agreement, license, franchise or any other material instrument or agreement to which the Company is a party or by which the Company or its properties may be bound or, to the knowledge or the Company, affected or to which the Company has not obtained an effective waiver.

Section 2.6. Litigation.

Except as set forth on Schedule 2.6, there is no litigation, arbitration, claim, proceeding or investigation pending or threatened in writing in which the Company or any Subsidiary is a party or to which any of its respective properties or assets is the subject which, if determined adversely to the Company or such Subsidiary, would individually or in the aggregate have a material adverse effect on the financial position, results of operations or business of the Company and its Subsidiaries, taken as a whole.

Section 2.7. Financial Statements.

The consolidated financial statements of the Company and its Subsidiaries for the fiscal years ended February 25, 1994, February 24, 1995, and February 23, 1996, and the unaudited consolidated financial statements as of the nine (9) months ended November 29, 1996, which the Company previously has heretofore delivered to Purchaser, fairly present the financial condition of the Company and its Subsidiaries as at the effective dates of and for the periods referred to in such financial statements and have been prepared in accordance with generally accepted accounting principles ("GAAP") consistently followed throughout the periods involved. The consolidated balance sheets and the related notes fairly present the financial condition of the Company and its

consolidated Subsidiaries as of the respective dates thereof, and the consolidated statements of income, cash flows and changes in stockholders' equity and the related notes fairly present the results of operations of the Company and its consolidated Subsidiaries for the respective periods indicated. There has been no material adverse change in the condition, financial or otherwise, of the Company and its Subsidiaries taken as a whole since November 29, 1996.

Section 2.8. SEC Reports.

The Company's Common Stock is listed on the American Stock Exchange and has been duly registered with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act")]. Since February 26, 1993, the Company has filed all reports, registrations, proxy or information statements and all other documents, together with any amendments required to be made thereto, required to be filed with the SEC under the Securities Act and the Exchange Act (collectively, the "SEC Reports"). Since February 26, 1995, the Company has timely filed all SEC Reports. The financial statements contained in the SEC Reports fairly presented the financial position of the Company as of the dates mentioned and the results of operations, changes in stockholders' equity and changes in financial position or cash flows for the periods then ended in conformity with GAAP applied on a consistent basis throughout the periods involved. The Company previously has furnished to Purchaser true copies of all the SEC Reports, together with all exhibits thereto that Purchaser has requested. As of their respective dates, the SEC Reports complied (or will comply, as the case may be) in all material respects with all rules and regulations promulgated by the SEC and did not (or will not, as the case may be) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

Section 2.9. Absence of Changes.

Since November 29, 1996, (i) neither the Company nor any of its Subsidiaries have incurred any liabilities or obligations, direct or contingent, or entered into any transactions, not in the ordinary course business, that are material to the Company, (ii) neither the Company nor any of its Subsidiaries have purchased any of its outstanding capital stock or declared, paid or otherwise made any dividend or distribution of any kind on its capital stock, (iii) there has not been any change in the capital stock, long-term debt or short-term debt of the Company, and (iv) there has not been any material adverse change, or any development involving a prospective material adverse change, in or affecting the condition (financial or otherwise), results of operations, business or prospects of the Company or any Subsidiary, taken as a whole.

Section 2.

Except as set forth on Schedule 2.10 and except where a default or event of default does not and would not constitute a Material Adverse Event, no default or event of default by the Company or any Subsidiary exists under this Agreement or any of the other Operative Documents, or under any other instrument or agreement to which the Company or any Subsidiary is a party or by which the Company or any Subsidiary or its respective properties may be bound or, to the knowledge of the Company, affected, and no event has occurred and is continuing that with notice or the passage of time or both would constitute a default or event of default thereunder.

Section 2.11. Compliance With Law.

To the Company's knowledge, the Company is in compliance with all laws, regulations, decrees and orders applicable to it (including but not limited to laws, regulations, decrees and orders relating to environmental, occupational and health standards and controls, antitrust, monopoly, restraint of trade or unfair competition) to the extent that noncompliance, in the aggregate, cannot reasonably be expected to cause a Material Adverse Event.

Section 2.12. Taxes.

Except as set forth on Schedule 2.12, the Company and its Subsidiaries have filed or caused to be filed all federal, state and local income, excise and franchise tax returns required to be filed (except for returns that have been appropriately extended), and has paid, or provided for the payment of, all taxes shown to be due and payable on said returns and all other taxes, impositions, assessments, fees or other charges imposed on it by any governmental authority, agency or instrumentality, prior to any delinquency with respect thereto (other than taxes, impositions, assessments, fees and charges currently being contested in good faith by appropriate proceedings, for which appropriate amounts have been reserved), and the Company does not know of any proposed assessment for additional taxes or any basis therefor. No tax liens have been filed against the Company or any of its properties. The Company's federal income tax liability has been finally determined by the Internal Revenue Service and satisfied for all taxable years up to and including the taxable year ended February 24, 1995 or closed by applicable statutes of limitation.

Section 2.13. Certain Transactions.

Except as set forth on Schedule 2.13(i) and except as to indebtedness incurred in the ordinary course of business and approved by the Board of Directors of the Company, neither the Company nor any Subsidiary is indebted, directly or indirectly, to any of its officers or directors, or to their respective spouses or children, in excess of an aggregate amount of \$60,000, and none of the officers or directors or any members of their immediate families are indebted to the Company or any Subsidiary in excess of an aggregate amount of \$60,000 or have any direct or indirect ownership interest in any firm or corporation with which the Company or any Subsidiary is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company or any Subsidiary, except that officers and/or directors of the Company may own no more than 1% of the outstanding stock of any publicly traded company which competes directly with the Company. Except as set forth on Schedule 2.13(ii), no officer or director of the Company or any Subsidiary or any member of their immediate families is, directly or indirectly, interested in any material contract with the Company. Except as set forth on Schedule 2.13(iii), neither the Company nor any Subsidiary is a quarantor or indemnitor of any indebtedness of any other person, firm or corporation.

Section 2.14. Title to Property.

The Company and each Subsidiary has good and marketable title to all of real and material personal property owned by it, free and clear of all liens, security interests, pledges, encumbrances, equities claims and restrictions of every kind and nature whatsoever, except as disclosed on Schedule 2.14 and except for such liens, security interests, pledges, encumbrances, equities claims and restrictions which are not in the aggregate material to the business, operations or financial condition of

the Company and its Subsidiaries taken as a whole. Any real property and buildings held under lease by the Company or any Subsidiary are held under valid existing and enforceable leases, except as disclosed on Schedule 2.14 or which are not material and do not interfere with the use to be made of such buildings or property by the Company.

Section 2.15. Intellectual Property.

Except as set forth in Schedule 2.15, the Company is the lawful owner or has a valid right to use the of its proprietary information used in its business free and clear of any claim, right, trademark, patent or copyright protection of any third party. As used herein, "proprietary information" includes without limitation (i) any computer software and related documentation, inventions, technical and nontechnical data related thereto, and (ii) other documentation, inventions and data related to patterns, plans, methods, techniques, drawings, finances, customer lists, suppliers, products, special pricing and cost information, designs, processes, procedures, formulas, research data owned or used by the Company or any Subsidiary or marketing studies conducted by the Company, all of which the Company considers to be commercially important and competitively sensitive and which generally has not been disclosed to third parties other than customers in the ordinary course of business. Except as set forth in Schedule 2.15, the Company has good and marketable title or has a valid right to use to all patents, trademarks, trade names, service marks, copyrights or other intangible property rights, and registrations or applications for registration thereof, owned by the Company or any Subsidiary or used or required by the Company or any Subsidiary in the operation of its business as presently being conducted. The Company has no knowledge of any infringements or conflict with asserted rights of others with respect to copyrights, patents, trademarks, service marks, trade names, trade secrets or other intangible property rights or know-how which could cause a material adverse event. To the Company's knowledge, no products or processes of the Company infringe or conflict with any rights of patent or copyright, or any discovery, invention product or process, that is the subject of a patent or copyright application or registration known to the Company. The Company follows such procedures as the Board of Directors of the Company deem necessary or appropriate to provide reasonable protection of the Company's trade secrets and proprietary rights in intellectual property of all kinds. To the knowledge of the Company, no person employed by or affiliated with the Company has employed or proposes to employ any trade secret or any information or documentation proprietary to any former employer, and to the knowledge of the Company, no person employed by or affiliated with the Company has violated any confidential relationship that such person may have had with any third person, in connection with the development, manufacture or sale of any product or proposed product or the development or sale of any service or proposed service of the Company.

Section 2.16. Accounting Matters.

The Company and each of its Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain assets accountability for the assets of the Company and each of its Subsidiaries; (iii) access to the assets of the Company and each of its Subsidiaries are permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets of

the Company and each of its Subsidiaries are compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

Section 2.17. Distributions to Company.

No Subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distributions on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary or from transferring any of such Subsidiary's property or assets to the Company or any other Subsidiary of the Company.

Section 2.18. Prior Sales.

All offers and sales of the Company's capital stock prior to the date hereof were at all relevant times (i) exempt from the registration requirements of the Securities Act or were registered under the Securities Act, and (ii) duly registered or were the subject of an available exemption from the requirements of all applicable state securities or Blue Sky laws.

Section 2.19. Regulatory Compliance.

Except as set forth on Schedule 2.19, the conduct of the business of the Company is not (and is not intended to be, as hereinafter conducted) dependent on any license, permit or other authorization of any federal, state or local regulatory body, and except as set forth on Schedule 2.19, such business is not subject to the regulation of any federal, state or local government regulatory body by reason of the nature of the business being conducted. All licenses, permits and authorizations set forth on Schedule 2.19 are in full force and effect.

Section 2.20. Registration Rights.

Except as described in Schedule 2.20, the Company is not under any obligation to register under the Securities Act or the Trust Indenture Act of 1939, as amended, any of its presently outstanding securities or any of its securities that may subsequently be issued.

Section 2.21. Environment.

The Company has duly complied in all material respects with, and its business, operations, assets, equipment, property, leaseholds or other facilities are in compliance in all material respects with the provisions of all federal, state and local environmental, health, and safety laws, codes and ordinances, and all rules and regulations promulgated thereunder. The Company has been issued and will maintain all required federal, state and local permits, licenses, certificates and approvals relating to (1) air emissions; (2) discharges to surface water or groundwater; (3) noise emissions; (4) solid or liquid waste disposal; (5) the use, generation, storage, transportation or disposal of toxic or hazardous substances or wastes (which shall include any and all such materials listed in any federal, state or local law, code or ordinance and all rules and regulations promulgated thereunder as hazardous or potentially hazardous); or (6) other environmental, health or safety matters. The Company has not received notice of, or knows of, or suspects facts which might constitute a material violation of any federal, state or local environmental, health or safety laws, codes or ordinances, and any rules or regulations promulgated thereunder with respect to its businesses, operations, assets, equipment, property, leaseholds, or other facilities. Except in accordance with a valid governmental permit, license, certificate or approval,

there has been no material emission, spill, release or discharge into or upon (1) the air; (2) soils, or any improvements located thereon; (3) surface water or groundwater; or (4) the sewer, septic system or waste treatment, storage or disposal system servicing the premises, of any toxic or hazardous substances or wastes at or from the premises. There has been no complaint, order, directive, claim, citation or notice by any governmental authority or any person or entity with respect to (1) air emissions; (2) spills, releases or discharges to soils or improvements located thereon, surface water, groundwater or the sewer, septic system or waste treatment, storage or disposal systems servicing the premises; (3) noise emissions; (4) solid or liquid waste disposal; (5) the use, generation, storage, transportation or disposal of toxic or hazardous substances or waste; or (6) other environmental, health or safety matters affecting the Company or its business, operations, assets, equipment, property, leaseholds or other facilities. The Company does not have any indebtedness, obligation or liability (absolute or contingent, matured or not matured), with respect to the storage, treatment, cleanup or disposal of any solid wastes, hazardous wastes or other toxic or hazardous substances (including without limitation any such indebtedness, obligation, or liability with respect to any current regulation, law or statute regarding such storage, treatment, cleanup or disposal).

Section 2.22. Insurance.

The Company has maintained, and has caused each Subsidiary to maintain, insurance coverage by financially sound and reputable insurers with respect to their respective properties and business in such forms and amounts and against such risks, casualties and contingencies as are customary for corporations of established reputation engaged in the same or a similar business and owning and operating similar properties.

Section 2.23. Governmental Consents.

No consent, approval, qualification, order or authorization of , or filing with, any local, state, or federal governmental authority is required on the part of the Company in connection with the Company's valid execution, delivery, or performance of this Agreement, the offer, sale or issuance of the Preferred Stock by the Company or the issuance of Common Stock upon conversion of the Preferred Stock, except (i) the filing of the Statement with Respect to Shares with the Secretary of State of the Commonwealth of Pennsylvania, and (ii) such filings as have been made prior to the Closing, except any notices of sale required to be filed with the Securities and Exchange commission under Regulation D of the Securities Act or such post-closing filings as may be required under applicable state securities laws, which will be timely filed within the applicable periods therefor.

Section 2.24. Offering.

Subject in part to the truth and accuracy of Purchaser's representations set forth in this Agreement, the offer, sale and issuance of the Preferred Stock as contemplated by this Agreement are exempt from the registration requirements of the Securities Act, and neither the Company nor any authorized agent acting on is behalf will take any action hereafter that would cause the loss of such exemption.

Section 2.25. Manufacturing Rights.

The Company has not granted rights to manufacture, produce, assemble, license, market, or sell its products to any other person and is not bound by any agreement that affects the

Company's exclusive right to develop, manufacture, assemble, distribute, market, or sell its products.

Section 2.26. Employees.

To the best of the Company's knowledge, there is no strike, labor dispute or union organization activities pending or threatened between it and its employees. None of the Company's employees belongs to any union or collective bargaining unit. To the best of its knowledge, the Company has complied in all material respects with all applicable state and federal equal opportunity and other laws related to employment. To the best of the Company's knowledge, no employee of the Company is or will be in violation of any judgment, decree, or order, or any term of any employment contract, patent disclosure agreement, or other contract or agreement relating to the relationship of any such employee with the Company, or any other party because of the nature of the business conducted or presently proposed to be conducted by the Company or to the use by the employee of his or her best efforts with respect to such business except as disclosed in Schedule 2.26. The Company is not a party to or bound by any currently effective employment contract, deferred compensation agreement, bonus plan, incentive plan, profit sharing plan, retirement agreement, or other employee compensation agreement. The Company is not aware that any officer or key employee, or that any group of key employees, intends to terminate their employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. Subject to general principles related to wrongful termination of employees, the employment of each officer and employee of the Company is terminable at the will of the Company.

Section 2.27. Fees/Commissions.

The Company has not agreed to pay any finder's fee, commission, origination fee (except for the processing due to Purchaser pursuant to Section 1.3 hereof) or other fee or charge to any person or entity with respect to the transactions contemplated hereunder, except a fee of \$529,981.23 payable to Berwind Financial Group, L.P. and a fee of \$75,000 payable to First Union National Bank.

Section 2.28. 1940 Act Compliance.

The Company is an "eligible portfolio company" as such term is defined in Section 2(a)(46) of the Investment Company Act of 1940, as amended (the "Investment Company Act"), and the issuance and sale by the Company of the Preferred Stock does not constitute a "public offering" as such term is used in Section 55(a)(1) thereof.

Section 2.29. ERISA.

Except as disclosed in Schedule 2.29, the Borrower is in compliance in all material respects with all applicable provisions of Title IV of the Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406, September 2, 1974, except as disclosed in Schedule 2.29, 88 Stat. 829, 29 U.S.C.A. Section 1001 et seq. (1975), as amended from time to time ("ERISA"). Neither a reportable event nor a prohibited transaction (as defined in ERISA) has occurred and is continuing with respect to any "pension plan" (as such term is defined in ERISA, a "Plan"); no notice of intent to terminate a Plan has been filed nor has any Plan been terminated; no circumstances exist which constitute grounds entitling the Pension Benefit Guaranty Corporation (together with any entity succeeding to or all of its functions, the "PBGC") to institute proceedings to terminate, or appoint a

trustee to administer, a Plan, nor has the PBGC instituted any such proceedings; neither Borrower nor any commonly controlled entity (as defined in ERISA) has completely or partially withdrawn from a multiemployer plan (as defined in ERISA); Borrower and each commonly controlled entity has met its minimum funding requirements under ERISA with respect to all of its Plans and the present fair market value of all Plan property exceeds the present value of all vested benefits under each Plan, as determined on the most recent valuation date of the Plan and in accordance with the provisions of ERISA and the regulations thereunder for calculating the potential liability of Borrower or any commonly controlled entity to the PBGC or the Plan under Title IV or ERISA; and neither Borrower nor any commonly controlled entity has incurred any liability to the PBGC under ERISA.

Section 2.30. Disclosure.

No representation or warranty given as of the date hereof by the Company contained in this Agreement or any schedule attached hereto or any statement in any document, certificate or other instrument furnished or to be furnished to the Purchaser pursuant hereto, taken as a whole, contains or will (as of the time so furnished) contain any untrue statement of a material fact, or omits or will (as of the time so furnished) omit to state any material fact which is necessary in order to make the statements contained herein or therein not misleading.

Section 2.31. Survival.

The representations and warranties of the Company contained in this Agreement shall survive until this Agreement terminates in accordance with Section 9.5 hereof.

ARTICLE III. - REPRESENTATIONS AND WARRANTIES OF PURCHASER

The Purchaser hereby represents to the Company as follows:

Section 3.1. Authorization.

Purchaser has full legal right, power and authority to enter into and perform its obligations under this Agreement, the Registration Rights Agreement and any other document executed and delivered by Purchaser in connection herewith, without the consent or approval of any other person, firm, governmental agency or other legal entity. The execution and delivery of this Agreement and any other document executed and delivered by Purchaser in connection herewith, and the performance by Purchaser of its obligations hereunder and/or thereunder are within the corporate powers of Purchaser, have received all necessary governmental approvals, if any were required, and do not and will not contravene or conflict with the Articles of Incorporation or Bylaws of Purchaser. The officer(s) executing this Agreement and any other document executed and delivered by Purchaser in connection herewith, is duly authorized to act on behalf of Purchaser.

Section 3.2. Validity and Binding Effect.

This Agreement and any other document executed and delivered by Purchaser in connection herewith are the legal, valid and binding obligations of the Purchaser, enforceable against it in accordance with their respective terms.

Section 3.3. Accredited Investor Status; Purchase for Investment.

In connection with the sale to Purchaser of the Preferred

Stock:

- (a) Purchase for Investment. Purchaser is acquiring the Preferred Stock for its own account as principal, for investment, and not with a view to the distribution or resale thereof, in whole or in part, in violation of the Securities Act or any applicable state securities law, and Purchaser has no present intention of selling, distributing or otherwise disposing of the Preferred Stock.
- (b) No Registration; Rule 144. (i) The Preferred Stock has not been registered under the Securities Act, and the shares of Preferred Stock are "restricted" securities, as defined in Rule 144; (ii) the shares of Preferred Stock may not be resold unless they are registered under the Securities Act or unless an exemption from registration is available; (iii) Purchaser understands that the availability of Rule 144 for the sale and transfer of the Preferred Stock is limited, and that certain conditions and events must exist before Purchaser would be able to utilize Rule 144 in connection with the sale or other disposition of the Preferred Stock.
- (c) Investment Company; Information. Purchaser is an investment company registered under the Investment Company Act and, to the knowledge of Purchaser, has received the financial and other information which it has requested from the Company. The Company has made available to Purchaser the opportunity to ask questions and receive answers from the Company concerning the terms and conditions of the offering of the Preferred Stock hereunder and to obtain any additional information necessary to verify the accuracy of any information contained in this Agreement or furnished as above stated.
- (d) Transfer to Subsidiary. Notwithstanding anything in this Section 3.3 to the contrary, Purchaser may transfer and assign to its rights and obligations under this Agreement to one or more of its wholly-owned Subsidiaries, provided that any such Subsidiary shall have executed an investment letter containing the representations, and warranties contained in this Section 3.3.

Section 3.4. Survival.

The representations and warranties of the Purchaser contained in this Agreement shall survive until this Agreement terminates in accordance with Section 9.5 hereof.

ARTICLE IV. - CONDITIONS PRECEDENT TO THE OBLIGATIONS OF PURCHASER

The obligation of Purchaser to purchase and pay for the Preferred Stock on the Closing Date shall be subject to the fulfillment on or before the Closing Date of each of the following conditions:

Section 4.1. Representations and Warranties.

The representations and warranties of the Company contained in this Agreement and in any Schedule hereto or any document or instrument delivered to Purchaser or its representatives hereunder, shall have been true and correct when made and shall be true and correct as of the Closing Date as if made on such date, except to the extent such representations and warranties expressly relate to a specific date. The Company shall have duly performed all of the covenants and agreements to be performed by it hereunder on or prior to the Closing Date.

The Company shall have delivered to Purchaser a certificate, dated the Closing Date, signed by the Chief Financial Officer of the Company substantially in the form attached hereto as Exhibit C.

Section 4.3. Satisfactory Proceedings.

All proceedings taken in connection with the transactions contemplated by this Agreement, and all documents necessary to the consummation thereof, shall be satisfactory in form and substance to Purchaser and Purchaser's counsel, and the Company shall have delivered to Purchaser a certificate, dated the Closing Date, signed by the Secretary of the Company substantially in the form attached hereto as Exhibit D.

Section 4.4. Statement With Respect to Shares.

The Statement With Respect to Shares shall have been filed with the Office of the Secretary of State of the Commonwealth of Pennsylvania.

Section 4.5. Registration Rights Agreement.

The Company shall have executed and delivered to the Purchaser the Registration Rights Agreement.

Section 4.6. Sale of Subordinated Debentures.

The closing with respect to the sale by the Company and the purchase by the Purchaser of 4,000,000 of the Company's 12% subordinated debentures due March 27, 2004, shall occur simultaneously with the sale of the Preferred Stock by the Company to the Purchaser.

Section 4.7. Closing of FUNB Financing.

The closing of the initial borrowing under the Revolving Credit Agreement between the Company and FUNB, dated as of March 27, 1997 (the "FUNB Facility") shall have occurred simultaneously with the closing hereunder.

Section 4.8. Legal Opinion.

Purchaser shall have received the opinion of Stevens & Lee, A Professional Corporation, counsel for the Company, dated the Closing Date, addressed to Purchaser, in form and substance satisfactory to Purchaser, and covering the matters set forth in Exhibit E hereto.

Section 4.9. The Company's Existence and Authority.

The Company shall have delivered to Purchaser the following certificates of public officials, in each case as of a recent date:

DMS the Articles of Incorporation of the Company, as amended by the Statement With Respect to Shares, certified by the Secretary of State of Pennsylvania;

- (b) a certificate of existence or good standing of the Company in the Commonwealth of Pennsylvania and as a foreign corporation in each of the jurisdictions set forth in Schedule 2.1(a);
- (c) the Articles of Association and the equivalent under applicable laws of a good standing certificate of ETC International Corporation.

Section 4.10. Required Consents.

Any consents or approvals required to be obtained from any third party, including any holder of indebtedness or any outstanding security of the Company, and any amendments of agreements which shall be necessary to permit the consummation of the transactions contemplated hereby on the Closing Date, shall have been obtained and all such consents or amendments shall be satisfactory in form and substance to Purchaser and Purchaser's counsel.

Section 4.11. Waiver of Conditions.

If on the Closing Date the Company fails to tender to Purchaser the Preferred Stock to be issued to Purchaser on such date or if the conditions specified in this Article IV have not been fulfilled, Purchaser may thereupon elect to be relieved of all further obligations under this Agreement. Without limiting the foregoing, if the conditions specified in this Article IV have not been fulfilled, Purchaser may waive compliance by the Company with any such condition to such extent as Purchaser, in Purchaser's sole discretion, may determine. Nothing in this Section 4.7 shall operate to relieve the Company of any of its obligations hereunder or to waive any of Purchaser's rights against the Company.

ARTICLE V. - CONDITIONS PRECEDENT TO THE OBLIGATIONS OF THE COMPANY

Section 5.1. Representations and Warranties.

The representations and warranties of the Purchaser contained in Section 3 shall be true on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of the date of the Closing Date.

Section 5.2. Qualifications.

All authorizations, approvals, or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Preferred Stock pursuant to this Agreement shall be duly obtained and effective as of the Closing Date.

ARTICLE VI. - COVENANTS OF COMPANY

From and after the Closing Date and continuing so long as Purchaser holds the Preferred Stock:

Section 6.1. Use of Proceeds.

The Company shall use the proceeds of the sale of the Preferred Stock only for the purposes set forth on Schedule 6.1 attached hereto.

Section 6.2. Repurchase of Preferred Stock.

Neither the Company nor any Subsidiary or Affiliate, directly or indirectly, may repurchase or make any offer to repurchase any Preferred Stock and the Preferred Stock may only be redeemed in accordance with its terms.

Section 6.3. Corporate Existence, Etc.

The Company will preserve and keep in force and effect, and

will cause each Subsidiary to preserve and keep in force and effect, its corporate existence and good standing in the state of incorporation thereof, its qualification and good standing as a foreign corporation in each jurisdiction where such qualification is required by applicable law except where the failure to so qualify would not have a material adverse effect on the financial condition or results of operations of the Company and all licenses and permits necessary to the proper conduct of its business.

Section 6.4. Maintenance, Etc.

The Company will maintain, preserve and keep, and will cause each Subsidiary to maintain, preserve and keep, its properties and assets which are used or useful in the conduct of its business (whether owned in fee or pursuant to a leasehold interest) in good repair and working order and from time to time will make all necessary repairs, replacements, renewals and additions so that at all times the efficiency thereof shall be maintained.

Section 6.5. Nature of Business.

Neither the Company nor any Subsidiary will engage in any business if, as a result, the general nature of the business, taken on a consolidated basis, which would then be engaged in by the Company and its Subsidiaries would be substantially changed from the general nature of the business engaged in by the Company and its Subsidiaries on the date of this Agreement.

Section 6.6. Insurance.

The Company will maintain, and will cause each Subsidiary to maintain, insurance coverage by financially sound and reputable insurers with respect to their respective properties and business in such forms and amounts and against such risks, casualties and contingencies as are customary for corporations of established reputation engaged in the same or a similar business and owning and operating similar properties.

Section 6.7. Taxes, Claims for Labor and Materials.

The Company will promptly pay and discharge, and will cause each Subsidiary promptly to pay and discharge, (i) all lawful taxes, assessments and governmental charges or levies imposed upon the property or business of the Company or such Subsidiary, respectively, (ii) all trade accounts payable in accordance with usual and customary business terms, and (iii) all claims for work, labor or materials, which if unpaid might become a lien or charge upon any property of the Company or such Subsidiary; provided the Company or such Subsidiary shall not be required to pay any such tax, assessment, charge, levy, account payable or claim if (i) the validity, applicability or amount thereof is being contested in good faith by appropriate actions or proceedings which will prevent the forfeiture or sale of any property of the Company or such Subsidiary or any material interference with the use thereof by the Company or such Subsidiary, and (ii) the Company or such Subsidiary shall set aside on its books, reserves deemed by it to be adequate with respect thereto.

Section 6.8. Compliance with Laws.

Except where failure to do so does not and would not constitute a Material Adverse Event, Company shall maintain its business operations and property owned or used in connection therewith in compliance with (i) all applicable federal, state and local laws, regulations and ordinances, and such laws,

regulations and ordinances of foreign jurisdictions, governing such business operations and the use and ownership of such property, and (ii) all agreements, licenses, franchises, indentures and mortgages to which Company is a party or by which Company or any of its properties is bound. Without limiting the foregoing, Company shall pay all of its indebtedness promptly and substantially in accordance with the terms thereof.

Section 6.9. ERISA Matters.

If Borrower has in effect, or hereafter institutes, a pension plan that is subject to the requirements of ERISA, then the following covenants shall be applicable during such period as any Plan shall be in effect: (i) Borrower hereby covenants that throughout the existence of the Plan, Borrower's contributions under the Plan will meet the minimum funding standards required by ERISA and Borrower will not institute a distress termination of the Plan; and (ii) Borrower covenants that it will send to Lender a copy of any notice of any "reportable event" (as defined in ERISA) required by ERISA to be filed with the Labor Department or the Pension Benefit Guaranty Corporation, at the time that such notice is so filed; provided, however, that the current violation of this covenant as described in Schedule 2.30 shall not be a violation of this Section 6.9 so long as such violation is cured within ten (10) days of the date hereof.

Section 6.10. Books and Records; Rights of Inspection.

The Company will keep, and will cause each Subsidiary to keep, proper books of record and account in which full and correct entries will be made of all dealings or transactions of or in relation to the business and affairs of the Company or such Subsidiary, in accordance with generally accepted accounting principles consistently maintained. The Company shall permit a representative of Purchaser to visit any of its properties and inspect its corporate books and financial records, and will discuss its accounts, affairs and finances with a representative of Purchaser, during reasonable business hours, at all such times as Purchaser may reasonably request.

Section 6.11. Reports.

The Company will furnish to Purchaser the following (provided, that this obligation shall be deemed satisfied if the Company delivers the following to the Purchaser in connection with that certain Debenture Purchase Agreement by and between the Company and Purchaser of even date herewith):

- (a) Monthly statements. Within twenty-five (25) days of the end of each month, beginning for the month of April, 1997, monthly internal financial reports which at a minimum shall consist of a balance sheet of the Company as of the close of such month and related statements of income and cash flows for the one-month period then ended, as well as any additional financial reports for such period routinely prepared with respect to the Company and the Subsidiaries;
- (b) Quarterly Statements. As soon as available and in any event within 45 days after the end of each quarterly fiscal period (except the last) of each fiscal year, copies of:
 - (i) consolidated and consolidating balance sheets of the Company and Subsidiaries as of the close of the three-month period then ended, setting forth in comparative form the consolidated figures for the corresponding period of the preceding fiscal year,

- (ii) consolidated and consolidating statements of income and retained earnings of the Company and Subsidiaries for the three-month period then ended, setting forth in comparative form the consolidated figures for the corresponding period of the preceding fiscal year, and
- (iii) consolidated and consolidating statements of cash flows of the Company and Subsidiaries for the portion of the fiscal year ending with such three-month period, setting forth in comparative form the consolidated figures for the corresponding period of the preceding fiscal year,

all in reasonable detail and accompanied by a certificate of an authorized financial officer of Company that such financial statements fairly present the financial condition and results of operations and cash flows of the Company and for the periods presented subject to normal par and adjustment;

- (c) Annual Statements. As soon as available and in any event within 90 days after the close of each fiscal year of the Company, copies of:
 - (i) consolidated and consolidating balance sheets of the Company and Subsidiaries as of the close of such fiscal year, and
 - (ii) consolidated and consolidating statements of income and retained earnings and cash flows of the Company and Subsidiaries for such fiscal year,

in each case setting forth in comparative form the consolidated figures for the preceding fiscal year, all in reasonable detail and accompanied by an unqualified report thereon of a firm of independent public accountants of recognized national standing or a firm reasonably acceptable to Purchaser;

- (d) Audit Reports. Promptly upon receipt thereof, one copy of each interim or special audit made by independent accountants of the books of the Company or any Subsidiary;
- (e) SEC and Other Reports. Promptly upon their becoming available, one copy of each financial statement, report, notice or proxy statement sent by the Company to stockholders generally and of each periodic or current report, and any registration statement or prospectus filed by the Company or any Subsidiary with any securities exchange or the SEC or any successor agency, and copies of any orders in any proceedings to which the Company or any of its Subsidiaries is a party, issued by any governmental agency, federal or state, having jurisdiction over the Company or any of its Subsidiaries. The Company specifically covenants to timely file each such item required to be filed with the SEC and each state requiring securities laws filings; and
- (f) Requested Information. With reasonable promptness, such other data and information as Purchaser or any such institutional holder may reasonably request.
 - Section 6.12. [Reserved].
 - Section 6.13. Board of Directors; Observer Rights.
- (a) Effective upon the closing of the transactions pursuant to Section 1.2 hereof, and for so long as the initial Purchaser or any Affiliate owns at least $33\ 1/3\%$ of the original number of shares of Preferred Stock sold hereby, (i) the size of

the Board of Directors of the Company shall be increased to six (6) directors and shall remain at such size, and (ii) the Company agrees to include a nominee of the initial Purchaser in management's slate of nominees to be elected to the Board of Directors and to recommend to the stockholders the election of such nominee.

(b) For so long as the Preferred Stock shall remain outstanding and is owned by Purchaser or any Affiliate, provided that no nominee of the initial Purchaser is a director, the Company shall invite one representative of Purchaser to attend, at the Company's expense, all meetings of the Company's Board of Directors and all committees of the Company's Board of Directors in a nonvoting capacity and, in this respect, shall give such representative copies of all notices and meeting agenda in advance of such meetings and shall permit such representative to review all documents and other materials provided to directors at such meetings. The Company shall also provide Purchaser, in advance, with copies of all actions proposed to be taken by the Board of Directors in lieu of meeting.

Section 6.14. [Reserved].

ARTICLE VII. - AMENDMENTS, WAIVERS AND CONSENTS

Section 7.1. Consent Required.

Any term, covenant, agreement or condition of this Agreement may, with the consent of the Company, be amended or compliance therewith may be waived (either generally or in a particular instance and either retroactively or prospectively, if the Company shall have obtained the consent in writing of the holders of at least 50% of the outstanding Preferred Stock.

Section 7.2. Effect of Amendment or Waiver.

Any such amendment or waiver shall apply equally to all of the holders of the Preferred Stock and shall be binding upon them, upon each future holder of any Preferred Stock and upon the Company. No such amendment or waiver shall extend to or affect any obligation not expressly amended or waived or impair any right consequent thereon.

ARTICLE VIII. - INTERPRETATION OF AGREEMENT; DEFINITIONS

Section 8.1. Definitions.

Unless the context otherwise requires, the terms hereinafter set forth when sued herein shall have the following meanings and the following definitions shall be equally applicable to both the singular and plural forms of any of the terms herein defined:

"Affiliate" shall mean any Person (a) which directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, the Company, (b) which beneficially owns or holds 5% or more of any class of the Voting Stock of the Company or (c) 5% or more of the Voting Stock (or in the case of a Person which is not a corporation, 5% or more of the equity interest) of which is beneficially owned or held by the Company or a Subsidiary. The term "control" means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of Voting Stock, by contract or otherwise.

"Material Adverse Event" shall mean any event or circumstance, or set of events or circumstances, individually or collectively, that reasonably could be expected to result in any (i) adverse effect upon the validity or enforceability of any of the Operative Documents, or (ii) material and adverse effect on the financial condition of the Company as represented to Purchaser herein or in any document delivered to Purchaser in connection herewith, or (iii) default or potential default under any of the Operative Documents.

"Person" shall mean an individual, partnership, corporation, trust or unincorporated organization, and a government or agency or political subdivision thereof.

"Rule 144" shall mean Rule 144 as promulgated by the SEC under the Securities Act, as such Rule may be amended from time to time, or any similar successor rule that may be promulgated by the SEC.

"Security" shall have the same meaning as in Section 2(1) of the Securities Act of 1933, as amended.

The term "Subsidiary" shall mean, as to any particular parent corporation, any corporation of which more than 50% (by number of votes) of the Voting Stock shall be owned by such parent corporation and/or one or more corporations which are themselves Restricted Subsidiaries of such parent corporation. The term "Subsidiary" shall mean a subsidiary of the Company.

Section 8.2. Accounting Principles.

Where the character or amount of any asset or liability or item of income or expense is required to be determined or any consolidation or other accounting computation is required to be made for the purposes of this Agreement, the same shall be done in accordance with GAAP, to the extent applicable, except where such principles are inconsistent with the requirements of this Agreement.

Section 8.3. Directly or Indirectly.

Where any provision in this Agreement refers to action to be taken by any Person, or which such Person is prohibited from taking such provision shall be applicable whether the action in question is taken directly or indirectly by such Person.

ARTICLE IX. - MISCELLANEOUS

Section 9.1. Expenses, Stamp Tax Indemnity.

Whether or not the transactions herein contemplated shall be consummated, the Company agrees to pay directly all of Purchaser's out-of-pocket expenses in connection with the entering into of this Agreement and the consummation of the transactions contemplated hereby, including but not limited to the reasonable fees, expenses and disbursements of Sherrard & Roe, PLC, Purchaser's counsel, the entering into of this Agreement and the consummation of duplicating and printing cost, and so long as Purchaser holds any of the Preferred Stock, all such expenses relating to any amendments, waivers or consents pursuant to the provisions hereof (whether or not the same are actually executed and delivered), including, without limitation, any amendments, waivers or consents resulting from any work-out, restructuring or similar proceedings relating to the performance by the Company of its obligations under this Agreement. The Company also agrees that it will pay and save Purchaser harmless against any and all liability with respect to stamp and other taxes, if any, which may be payable in connection with the execution and delivery of this Agreement or the issuance of the Preferred Stock, whether or not any shares of Preferred Stock are then outstanding. The Company agrees to protect and indemnify

Purchaser against any liability for any and all brokerage fees and commissions payable or claimed to be payable to any Person in connection with the transactions contemplated by this Agreement.

Section 9.2. Powers and Rights Not Waived; Remedies Cumulative.

No delay or failure on the part of the holder of any Preferred Stock in the exercise of any power or right shall operate as a waiver thereof; nor shall any single or partial exercise of the same preclude any other of further exercise thereof, or the exercise of any other power or right, and the rights and remedies of the holder of any Preferred Stock are cumulative to and are not exclusive of any rights or remediesy such holder would otherwise have, and no waiver or consent, given or extended pursuant to Article XI hereof, shall extend to or affect any obligation or right not expressly waived or consented to.

Section 9.3. Notices.

All communications provided for hereunder shall be in writing and shall be delivered personally, or mailed by registered mail, or by prepaid overnight air courier, or by facsimile communication, in each case addressed:

If to Purchaser: Tandem Capital, Inc.

500 Church Street, Suite 200 Nashville, Tennessee 37219

Fax: (615) 726-1208 Attention: Craig Macnab

with a copy to: Sherrard & Roe, PLC

424 Church Street, Suite 2000 Nashville, Tennessee 37219

Fax: (615) 742-4539

Attention: Donald I.N. McKenzie, Esq.

If to the Company: Environmental Tectonics Corporation

125 James Way

Southampton, Pennsylvania 18966-3877

Fax: (215) 357-4000

Attention: William F. Mitchell

with a copy to: Stevens & Lee, A Professional

 ${\tt Corporation}$

One Glenhardie Corporate Center

1275 Drummers Lane

P.O. Box 236

Wayne, Pennsylvania 19087

Fax: (610) 687-1384

Attention: Jeffrey P. Waldron, Esq.

or such other address as Purchaser or the subsequent holder of any Preferred Stock initially issued to Purchaser may designate to the Company in writing, or such other address as the Company may in writing designate to Purchaser or to a subsequent holder of the Preferred Stock initially issued to Purchaser, provided, however, that a notice sent by overnight air courier shall only be effective if delivered at a street address designated for such purpose by such person and a notice sent by facsimile communication shall only be effective if made by confirmed transmission at a telephone number designated for such purpose by such person or, in either case, as Purchaser or a subsequent holder of any Preferred Stock initially issued to Purchaser may designate to the Company in writing or at a telephone number herein set forth in the case of the Company.

Section 9.4. Successors and Assigns.

This Agreement and the other Operative Documents may be endorsed, assigned and/or transferred in whole or in part by Purchaser, and any such holder and/or assignee of the same shall succeed to and be possessed of the rights and powers of Purchaser under all of the same to the extent transferred and assigned. The Company shall not assign any of its rights nor delegate any of its duties under this Agreement or any of the other Operative Documents by operation of law or otherwise without the prior express written consent of Purchaser, and in the event the Company obtains such consent, this Agreement and the other Operative Documents shall be binding upon such assignee.

Section 9.5. Survival of Covenants and Representations.

All covenants, representations and warranties made by the Company herein and in any certificates delivered pursuant hereto, whether or not in connection with the Closing Date, shall survive the closing and the delivery of this Agreement and the Closing Date.

Section 9.6. Severability.

Should any part of this Agreement for any reason be declared invalid or unenforceable, such decision shall not affect the validity of any remaining portion, which remaining portion shall remain in force and effect as if this Agreement had been executed with the invalid or unenforceable portion thereof eliminated and it is hereby declared the intention of the parties hereto that they would have executed the remaining portion of this Agreement without including therein any such part, parts or portion which may for any reason, be hereafter declared invalid or unenforceable.

Section 9.7. Governing Law.

This agreement and the Preferred Stock issued and sold hereunder shall be governed by and construed in accordance with Tennessee law, without regard to its conflict of law rules.

Section 9.8. Captions; Counterparts.

The descriptive headings of the various Sections or parts of this Agreement are for convenience only and shall not affect the meaning or construction of any of the provisions hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Section 9.9. Entire Agreement.

This Agreement constitutes the entire agreement of the parties with regard to the sale of the Preferred Stock.

* * *

IN WITNESS WHEREOF, the parties hereto have caused this Preferred Stock Purchase Agreement to be executed and delivered by their duly authorized officers as of the date first written above.

COMPANY: ENVIRONMENTAL TECTONICS CORPORATION

By:/s/ Duane Deaner
 Duane Deaner, Chief Financial Officer

PURCHASER:

SIRROM CAPITAL CORPORATION

By:/s/ Craig Macnab Name: Craig Macnab Title: Vice President THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAW AND MAY NOT BE TRANSFERRED UNTIL (I) A REGISTRATION STATEMENT UNDER THE ACT AND SUCH APPLICABLE STATE SECURITIES LAWS SHALL HAVE BECOME EFFECTIVE WITH REGARD THERETO, OR (II) IN THE OPINION OF COUNSEL ACCEPTABLE TO THE COMPANY, REGISTRATION UNDER THE ACT AND SUCH APPLICABLE STATE SECURITIES LAWS IS NOT REQUIRED IN CONNECTION WITH SUCH PROPOSED TRANSFER.

STOCK PURCHASE WARRANT

This Warrant is issued this 27th day of March, 1997, by ENVIRONMENTAL TECTONICS CORPORATION, a Pennsylvania corporation (the "Company"), to SIRROM CAPITAL CORPORATION, a Tennessee corporation (SIRROM CAPITAL CORPORATION and any subsequent assignee or transferee hereof are hereinafter referred to collectively as "Holder" or "Holders").

AGREEMENT:

- 1. Issuance of Warrant; Term. For and in consideration of SIRROM CAPITAL CORPORATION purchasing from the Company its debenture due March 27, 2004, in the initial principal amount of Four Million and no/100ths Dollars (the "Debenture") pursuant to the terms of a Debenture Purchase Agreement of even date herewith (the "Debenture Purchase Agreement"), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company hereby grants to Holder the right to purchase 166,410 shares of the Company's common stock, par value \$.10 per share (the "Common Stock"), which the Company represents to equal five percent (5%) of the shares of capital stock outstanding on the day immediately prior to the date hereof, calculated on a fully diluted basis, excluding the shares of Common Stock issuable upon conversion of the Series A Convertible Preferred Stock of the Company issued and sold to Sirrom Capital Corporation on the date hereof and assuming exercise of this Warrant ("Base Amount"). The shares of Common Stock issuable upon exercise of this Warrant are hereinafter referred to as the "Shares." This Warrant shall be exercisable at any time and from time to time from the date hereof until March 27, 2004.
- 2. Exercise Price. The exercise price (the "Exercise Price") per share for which all or any of the Shares may be purchased pursuant to the terms of this Warrant shall be One Dollar (\$1.00).
- Exercise. This Warrant may be exercised by the Holder hereof (but only on the conditions hereinafter set forth) as to all or any increment or increments of one hundred (100) Shares (or the balance of the Shares if less than such number), upon delivery of written notice of intent to exercise to the Company at the following address: 125 James Way, Southampton, PA 18966-3877 or such other address as the Company shall designate in a written notice to the Holder hereof, together with this Warrant and payment to the Company of the aggregate Exercise Price of the Shares so purchased. The Exercise Price shall be payable, at the option of the Holder, (i) by certified or bank check, (ii) by the surrender of the Debenture or portion thereof having an outstanding principal balance equal to the aggregate Exercise Price or (iii) by the surrender of a portion of this Warrant where the Shares subject to the portion of this Warrant that is surrendered have a Fair Market Value (as defined in Section 4(c) below) equal to the aggregate Exercise Price. Upon

exercise of this Warrant as aforesaid, the Company shall as promptly as practicable, and in any event within fifteen (15) days thereafter, execute and deliver to the Holder of this Warrant a certificate or certificates for the total number of whole Shares for which this Warrant is being exercised in such names and denominations as are requested by such Holder. If this Warrant shall be exercised with respect to less than all of the Shares, the Holder shall be entitled to receive a new Warrant covering the number of Shares in respect of which this Warrant shall not have been exercised, which new Warrant shall in all other respects be identical to this Warrant. The Company covenants and agrees that it will pay when due any and all state and federal issue taxes which may be payable in respect of the issuance of this Warrant or the issuance of any Shares upon exercise of this Warrant.

- (a) Neither this Warrant nor the Shares have been registered under the Securities Act of 1933, as amended ("Securities Act") or any state securities laws ("Blue Sky Laws"). This Warrant has been acquired for investment purposes and not with a view to distribution or resale and may not be sold or otherwise transferred without (i) an effective registration statement for such Warrant under the Securities Act and such applicable Blue Sky Laws, or (ii) an opinion of counsel, which opinion and counsel shall be reasonably satisfactory to the Company and its counsel, that registration is not required under the Securities Act or under any applicable Blue Sky Laws (the Company hereby acknowledges that Sherrard & Roe, PLC is acceptable counsel). Transfer of the shares issued upon the exercise of this Warrant shall be restricted in the same manner and to the same extent as the Warrant and the certificates representing such Shares shall bear substantially the following legend:

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAW AND MAY NOT BE TRANSFERRED UNTIL (I) A REGISTRATION STATEMENT UNDER THE ACT AND SUCH APPLICABLE STATE SECURITIES LAWS SHALL HAVE BECOME EFFECTIVE WITH REGARD THERETO, OR (II) IN THE OPINION OF COUNSEL ACCEPTABLE TO THE COMPANY, REGISTRATION UNDER SUCH ACT AND SUCH APPLICABLE STATE SECURITIES LAWS IS NOT REQUIRED IN CONNECTION WITH SUCH PROPOSED TRANSFER.

The Holder hereof and the Company agree to execute such other documents and instruments as counsel for the Company reasonably deems necessary to effect the compliance of the issuance of this Warrant and any shares of Common Stock issued upon exercise hereof with applicable federal and state securities laws.

(b) The Company covenants and agrees that all Shares which may be issued upon exercise of this Warrant will, upon issuance and payment therefor, be legally and validly issued and outstanding, fully paid and nonassessable, free from all taxes, liens, charges and preemptive rights, if any, with respect thereto or to the issuance thereof. The Company shall at all times reserve and keep available for issuance upon the exercise

of this Warrant such number of authorized but unissued shares of Common Stock as will be sufficient to permit the exercise in full of this Warrant.

- (c) The Company covenants and agrees that it shall not sell any shares of the Company's capital stock at a price per share below the Fair Market Value of such shares, without the prior written consent of the Holder hereof except pursuant to exercise of (i) options outstanding as of the date hereof, (ii) options granted subsequent to the date hereof provided, however, the exercise price of such options is no less than the Fair Market Value of the Common Stock at the date of the grant, or (iii) the warrant for the purchase of 100,000 shares of Common Stock currently held by Chase Manhattan Capital Corporation. In the event that the Company sells shares of the Company's capital stock in violation of this Section 3(c), the number of shares issuable upon exercise of this Warrant shall be equal to the product obtained by multiplying the number of shares issuable pursuant to this Warrant prior to such sale by the quotient obtained by dividing (i) the Fair Market Value of the shares issued in violation of this Section 3(c) by (ii) the price at which such shares were sold.
- (d) "Fair Market Value" per share of Common Stock shall mean (i) in the case of a security listed or admitted to trading on any securities exchange, the last reported sale price, regular way (as determined in accordance with the practices of such exchange), on such day, or if no sale takes place on such day, the average of the closing bid and asked prices on such day (and in the case of a security traded on more than one national securities exchange, at such price or such average, upon the exchange on which the volume of trading during the last calendar year was the greatest), (ii) in the case of a security not then listed or admitted to trading on any securities exchange, the last reported sale price on such day, or if no sale takes place on such day, the average of the closing bid and asked prices on such day, as reported by a reputable quotation service designated by the Company, (iii) in the case of a security not then listed or admitted to trading on any securities exchange and as to which no such reported sale price or bid and asked prices are available, the average of the reported high bid and low asked prices on such day, as reported by a reputable quotation service, or the Wall Street Journal, or if there are no bids and asked prices on such day, the average of the high bid and low asked prices, as so reported, on the most recent day (not more than 30 days prior to the date in question) for which prices have been so reported, and (iv) in the case of a security determined by the Company's Board of Directors as not having an active quoted market or in the case of other property, such fair market value as shall be determined by the Board of Directors. The determination as to whether any fractional shares are issuable shall be based upon the total number of shares of Preferred Stock being converted at any one time by any holder thereof, not upon each share of Preferred Stock being converted.
- (e) In the event that the Company, pursuant to the terms of that certain letter agreement dated July 28, 1994, between the Company and Osprey Partners ("Osprey"), grants to Osprey a warrant to purchase 125,000 shares of the Common Stock, then the number of Shares as to which this Warrant initially is exercisable shall be increased by 6,250 shares, subject to further adjustment as provided herein.
- 5. Transfer of Warrant. Subject to the provisions of Section 3 hereof, this Warrant may be transferred, in whole or in part, to any person or business entity, by presentation of the Warrant to the Company with written instructions for such transfer; provided, however, that this Warrant shall not be

transferred without the prior written consent of the Company to either of Wyle Labs or Latecoere or to any entity that controls, is controlled by, or is under common control with either of Wyle Labs or Latecoere. Upon such presentation for transfer, the Company shall promptly execute and deliver a new Warrant or Warrants in the form hereof in the name of the assignee or assignees and in the denominations specified in such instructions. The Company shall pay all expenses incurred by it in connection with the preparation, issuance and delivery of Warrants under this Section.

- 6. Warrant Holder Not Shareholder; Rights Offering; Preemptive Rights. Except as otherwise provided herein, this Warrant does not confer upon the Holder, as such, any right whatsoever as a shareholder of the Company. Notwithstanding the foregoing, if the Company should offer to all of the Company's shareholders the right to purchase any securities of the Company, then all shares of Common Stock that are subject to this Warrant shall be deemed to be outstanding and owned by the Holder and the Holder shall be entitled to participate in such rights offering. The Company shall not grant any preemptive rights with respect to any of its capital stock without the prior written consent of the Holder.
- 7. Observation Rights. A nominee of the holder of that portion of this Warrant representing a majority of underlying shares shall receive notice of and be entitled to attend or may send a representative to attend all meetings of the Company's Board of Directors in a non-voting observation capacity and shall receive a copy of all correspondence and information delivered to the Company's Board of Directors, from the date hereof until such time as the indebtedness evidenced by the Debenture has been paid in full; provided, however, that this requirement shall be deemed satisfied so long as a nominee of the original purchaser of the Debenture is a director of the Company.

8. Adjustment Upon Changes in Stock.

- (a) If all or any portion of this Warrant shall be exercised subsequent to any stock split, stock dividend, recapitalization, combination of shares of the Company, or other similar event, occurring after the date hereof, then the Holder exercising this Warrant shall receive, for the aggregate price paid upon such exercise, the aggregate number and class of shares which such Holder would have received if this Warrant had been exercised immediately prior to the record date for such stock split, stock dividend, recapitalization, combination of shares, or other similar event. If any adjustment under this Section 8(a), would create a fractional share of Common Stock or a right to acquire a fractional share of Common Stock, such fractional share shall be disregarded and the number of shares subject to this Warrant shall be the next higher number of shares, rounding all fractions upward. Whenever there shall be an adjustment pursuant to this Section 8(a), the Company shall forthwith notify the Holder or Holders of this Warrant of such adjustment, setting forth in reasonable detail the event requiring the adjustment and the method by which such adjustment was calculated.
- (b) If all or any portion of this Warrant shall be exercised subsequent to any merger, consolidation, exchange of shares, separation, reorganization or liquidation of the Company, or other similar event, occurring after the date hereof, as a result of which shares of Common Stock shall be changed into the same or a different number of shares of the same or another class or classes of securities of the Company or another entity, or the holders of Common Stock are entitled to receive cash or other property, then the Holder exercising this Warrant shall receive, for the aggregate price paid upon such exercise, the aggregate

number and class of shares, cash or other property which such Holder would have received if this Warrant had been exercised immediately prior to such merger, consolidation, exchange of shares, separation, reorganization or liquidation, or other similar event. If any adjustment under this Section 8(b) would create a fractional share of Common Stock or a right to acquire a fractional share of Common Stock, such fractional share shall be disregarded and the number of shares subject to this Warrant shall be the next higher number of shares, rounding all fractions upward. Whenever there shall be an adjustment pursuant to this Section 8(b), the Company shall forthwith notify the Holder or Holders of this Warrant of such adjustment, setting forth in reasonable detail the event requiring the adjustment and the method by which such adjustment was calculated.

- 9. Certain Notices. In case at any time the Company shall propose to:
- $\hbox{(a)}\quad \mbox{declare any cash dividend upon its Common Stock;}$
- (b) declare any dividend upon its Common Stock payable in stock or make any special dividend or other distribution to the holders of its Common Stock;
- (c) offer for subscription to the holders of any of its Common Stock any additional shares of stock in any class or other rights;
- (d) reorganize, or reclassify the capital stock of the Company, or consolidate, merge or otherwise combine with, or sell of all or substantially all of its assets to, another corporation;
- (e) voluntarily or involuntarily dissolve, liquidate or wind up of the affairs of the Company; or
- (f) redeem or purchase any shares of its capital stock or securities convertible into its capital stock;

then, in any one or more of said cases, the Company shall give to the Holder of the Warrant, by certified or registered mail, (i) at least twenty (20) days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, and (ii) in the case of such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least twenty (20) days' prior written notice of the date when the same shall take place. Any notice required by clause (i) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto, and any notice required by clause (ii) shall specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

- 10. Article and Section Headings. Numbered and titled article and section headings are for convenience only and shall not be construed as amplifying or limiting any of the provisions of this Warrant.
- 11. Notice. Any and all notices, elections or demands permitted or required to be made under this Warrant shall be in

writing, signed by the party giving such notice, election or demand and shall be delivered personally, telecopied, telexed, or sent by certified mail or overnight via nationally recognized courier service (such as Federal Express), to the other party at the address set forth below, or at such other address as may be supplied in writing and of which receipt has been acknowledged in writing. The date of personal delivery or telecopy or two (2) business days after the date of mailing (or the next business day after delivery to such courier service), as the case may be, shall be the date of such notice, election or demand. For the purposes of this Warrant:

The Address of Holder is: Sirrom Capital Corporation

500 Church Street, Suite 200 Nashville, Tennessee 37219 Attention: Craig Macnab Fax No. (615) 726-1208

with a copy to: Sherrard & Roe, PLC

424 Church Street, Suite 2000 Nashville, Tennessee 37219 Attention: Donald I.N. McKenzie,

Esq.

Fax No. (615) 742-4539

The Address of Company is: Environmental Tectonics Corporation

125 James Way

Southampton, Pennsylvania 18966-3877

Attention: William F. Mitchell

Fax No. (215) 357-4000

with a copy to: Stevens & Lee, A Professional

Corporation

One Glenhardie Corporate Center

1275 Drummers Lane

P.O. Box 236

Wayne, Pennsylvania 19087

Attention: Jeffrey P. Waldron, Esq.

Fax No. (610) 687-1384

- 12. Severability. If any provisions(s) of this Warrant or the application thereof to any person or circumstances shall be invalid or unenforceable to any extent, the remainder of this Warrant and the application of such provisions to other persons or circumstances shall not be affected thereby and shall be enforced to the greatest extent permitted by law.
- 13. Entire Agreement. This Warrant between the Company and Holder represents the entire agreement between the parties concerning the subject matter hereof, and all oral discussions and prior agreement are merged herein.
- 14. Governing Law and Amendments. This Warrant shall be construed and enforced under the laws of the State of Tennessee applicable to contracts to be wholly performed in such State. No amendment or modification hereof shall be effective except in a writing executed by each of the parties hereto.
- 15. Counterparts. This Warrant may be executed in any number of counterparts and be different parties to this Warrant in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same Warrant.
- 16. Jurisdiction and Venue. The Company hereby consents to the jurisdiction of the courts of the State of Tennessee and the United States District Court for the Middle District of Tennessee, as well as to the jurisdiction of all

courts from which an appeal may be taken from such courts, for the purpose of any suit, action or other proceeding arising out of any of its obligations arising under this Agreement or with respect to the transactions contemplated hereby, and expressly waives any and all objections it may have as to venue in any of such courts.

17. Equity Participation. This Warrant is issued in connection with the Debenture Purchase Agreement. It is intended that this Warrant constitute an equity participation under and pursuant to T.C.A. Section 47-24-101, et seq. and that equity participation be permitted under said statutes and not constitute interest on the Debenture. If under any circumstances whatsoever, fulfillment of any obligation of this Warrant, the Debenture Purchase Agreement, or any other agreement or document executed in connection with the Debenture Purchase Agreement, shall violate the lawful limit of any applicable usury statute or any other applicable law with regard to obligations of like character and amount, then the obligation to be fulfilled shall be reduced to such lawful limit, such that in no event shall there occur, under this Warrant, the Debenture Purchase Agreement, or any other document or instrument executed in connection with the Debenture Purchase Agreement, any violation of such lawful limit, but such obligation shall be fulfilled to the lawful limit. If any sum is collected in excess of the lawful limit, such excess shall be applied to reduce the principal amount of the Debenture.

IN WITNESS WHEREOF, the parties hereto have set their hands as of the date first above written.

COMPANY: ENVIRONMENTAL TECTONICS

CORPORATION:

By:/s/ Duane Deaner
Duane Deaner
Chief Financial Officer

HOLDER: SIRROM CAPITAL CORPORATION

By:/s/ Craig Macnab
Name: Craig Macnab
Title: Vice President

FINANCIAL REVIEW (\$ in thousands, except per share data)

Fiscal Year End	1997	1996	1995	1994	1993
Net sales	\$21,884	\$15,580	\$16,188	\$16,986	\$24,363
Cost of goods sold	16,142(1)	10,374	12,091	14,065	17,209
Operating expenses	4,546	3,714	4,988	4,592	5,792
Net income (loss)	(20)	299	(1,405)	(1,413)	373
Earnings (loss) per					
common shares and					
common stock equiva-					
lent shares	(.01)	.10	(.49)	(.50)	.13
Working capital	9,548	7,860	9,038	10,130	9,457
Long-term obligations	6 , 997	5,514	7,133	6,718	4,383
Total assets	\$ 22,309	\$ 20 , 926	\$ 20,803	\$ 18,024	\$21,306

No cash dividends have ever been paid on the Company's common stock, and the Company is currently prohibited from declaring any cash dividends under the terms of its credit facility.

(1) Cost of goods sold includes \$556 for inventory write-downs, \$143 for additional depreciation recorded on a demonstrator unit transferred from inventory to fixed assets, \$284 for a reserve for an arbitration settlement related to the Company's government claims awarded after fiscal year-end, and additional amortization expense of \$109 for capitalized software.

Management's Discussion and Analysis of Financial Condition and Results of Operations (\$ in Thousands, except per share amounts)

Results of Operations

Fiscal 1997 Versus Fiscal 1996

Fiscal 1997 sales increased 40% over fiscal 1996 sales as significant increases in Aircrew Training Systems products and the Sterilizers segment were only partially offset by a decrease in the Environmental line (for information concerning business segments, see Note 10 to the consolidated financial statements).

Cost of goods sold as a percentage of sales increased to 74% from 67% in fiscal 1996. Overall, this increase primarily reflected the write-down of \$556 of certain slow-moving products primarily in the Aircrew Training Systems segment, \$143 of additional depreciation expense for a demonstrator unit transferred from inventory to fixed assets, \$284 related to the Company's outstanding claim with the U.S. Navy, including an arbitration award in late April 1997 to one of the Company's subcontractors in the Navy CFET project for various work performed in the building part of the project, and \$109 of additional amortization expense relating to capitalized software costs of a certain product. The Company continues to actively market the slow-moving items. The Company is currently reviewing the arbitration costs as well as additional expenditures made through October 1996 on the CFET project to determine which, if any, will be added to the existing claims against the U.S. Government.

The Aircrew Training Systems segment reported a significantly higher sales level, up \$5,209, or 65%, as a result of continuing production on certain large contracts and a further expansion of the Company's Contractor Operator and Maintenance (COMS) business. As has been reported, the Company's backlog in the Aircrew Training systems segment has grown significantly in the most recent period, reflecting, to some extent, a stabilization of the world defense market. However, despite the sales increase, operating income decreased, reflecting a portion of the aforementioned inventory write-downs, depreciation and amortization expense and arbitration award as well as a larger allocated share of the selling, general and administrative pool of expenses.

Sales in the Sterilizers segment increased \$1,451, or 30%, reflecting the completion of certain larger contracts coupled with increased service and spare parts activity. Operating performance was a profit of \$151 versus a loss in the prior period. This profit resulted from the higher volume coupled with a slight increase in the gross margin on a better mix of work and only partially offset by the aforementioned inventory write-down.

The Environmental Systems segment experienced both decreased sales and a higher operating loss. This segment experienced lower bookings throughout the period coupled with higher costs on certain products. The Company has recently implemented personnel and product changes to strengthen operating results.

Operating and Other Expenses

Selling and administrative expenses in fiscal 1997 increased \$819 compared to the prior period but as a percent of sales decreased to 20.0% from 22.8%. Approximately 90% of the increase was comprised of increased sales commissions, advertising and trade shows, and accounting and legal fees. The increase in commissions reflected a greater mix of commissionable sales and the increased sales activity. Advertising, brochures and trade show activity increased because the Company made a conscious effort to expand its presence and influence via technical publications, symposiums, etc. Accounting and legal fees increased as the Company evaluated its options for recapitalization that was ultimately completed in March 1997. The increased costs were partially offset by lower salary expense in the selling and administrative area despite the heightened activity.

Research and development expenditures increased slightly. The Company continues to monitor this activity tightly.

Interest expense increased in fiscal 1997 over fiscal 1996. The increase reflected amortization in the current period of a non-cash deferred finance charge (\$202) associated with warrants issued in conjunction with the Company's credit facility renewal in February 1996 coupled with interest charges for federal and state tax settlements. Interest on bank borrowing decreased as a result of lower average loan balances.

Other expenses decreased, primarily reflecting reduced foreign exchange and other fees.

Fiscal 1996 Versus Fiscal 1995

Fiscal 1996 sales decreased from fiscal 1995 sales as decreases in the Sterilizers and Environmental Systems segments were only partially offset by increased sales in the Aircrew Training Systems segment. (For information concerning business segments, see Note 10 to the consolidated financial statements.)

Cost of goods sold as a percentage of sales decreased to 67% from 75% in fiscal year 1995, primarily reflecting higher sales in the Aircrew Training Systems segment (Aircrew Training Systems sales historically reflect higher gross margins) coupled with the continuing positive effects of stringent cost controls.

The Aircrew Training Systems segment reported a significantly increased operating income in fiscal 1996 versus fiscal 1995, reflecting the aforementioned increased sales volume (up 40% from the prior fiscal year). Operating income in the Aircrew Training Systems segment was also positively affected by the continued expansion of the Company's COMS business which involves training, operation and support at various operations throughout the world.

The Sterilizers segment incurred a higher operating loss in fiscal 1996 versus fiscal 1995, reflecting the decreased sales volume (down 32%), partially offset by reduced operating expenses.

The Environmental Systems segment realized a lower operating loss in fiscal 1996 versus fiscal 1995 despite a 21% decrease in sales volume. Reduced operating income from the sales reduction was offset by the completion of higher margin projects domestically and the positive impact of reduced operating expenses.

International sales have been a significant portion of the Company's business in recent years. In fiscal 1996, approximately 59% of the Company's sales represented foreign sales. International sales were spread across all business segments in the 1996 fiscal period, representing 27% of the total sales from the Sterilizers and Environmental Systems segments. Management believes that the international market will continue to comprise a significant portion of the Company's new business in the next fiscal year.

Operating and Other Expenses

Selling and administrative expenses decreased in fiscal 1996 versus fiscal 1995. The reduction resulted from a reduced number of full-time equivalent employees in fiscal 1996 coupled with continuing stringent cost controls.

Research and development expenditures in fiscal 1996 decreased significantly from the prior period. This primarily reflected the completion in certain major contracts of the development stage on new products, line extensions and software design and the beginning of production upon the attainment of technical feasibility.

Interest expense increased in fiscal 1996 versus fiscal 1995, reflecting higher interest rates coupled with higher interest amortization expense on long-term obligations, that were only partially offset by a lower average loan balance.

Letter of credit fees and other expenses both decreased in the 1996 fiscal period compared to 1995, reflecting reduced bank fees and loan amortization costs.

Liquidity and Capital Resources

At February 28, 1997, the Company had a revolving credit facility with a bank (the "Old Credit Facility") that provided financing of up to an aggregate of \$7.7 million. The facility was due to expire on March 31, 1997.

In connection with the 1996 extension of the Old Credit

Facility to March 31, 1997, the Company issued to the bank warrants to purchase 100,000 shares of the Company's common stock at a price equal to \$5.18. The Company has agreed to file a registration statement with the Securities and Exchange Commission to register the common stock issuable upon exercise of the warrants. If the Registration Statement is not effective prior to July 15, 1997, the Company will forfeit a \$375,000 escrow to the bank.

On March 27, 1997, the Company executed a revolving credit agreement (the "Credit Agreement") with a new bank establishing a credit facility of \$10 million. The facility bears interest at the bank's prime rate and expires on May 31, 1999. Substantially all of the Company's short-term financing is provided by this bank. Additionally, the Company issued \$4 million of subordinated debentures, bearing interest at 12% per annum, due March 27, 2004 to a financial investor. In connection with the subordinated debentures, warrants were issued to acquire 166,410 shares of the Company's common stock at an exercise price of \$1.00 per share. \$499 of the proceeds from the sale of the debentures was allocated to the warrants and will be charged to income over the term of the debentures. The Company also issued 25,000 shares of 11%, \$100 face value, convertible preferred stock for \$2.5 million. Each share of preferred stock is convertible, at the option of the shareholder, into 13.33 shares of the Company's common stock at a price of \$7.50 per share.

The proceeds from these transactions were used to repay amounts outstanding under the Old Credit Facility at February 28, 1997

Because of write-downs of certain inventory and other year-end adjustments that resulted in the Company recognizing a net loss of \$20 for the fiscal year ended February 28, 1997, as of June 6, 1997, the bank has made all credit availability under the Credit Agreement subject to specific prior approval by the bank pending a review of the Company's financial condition. The Company believes this restriction will be temporary.

During fiscal 1997, the Company's net cash position increased to \$189 at February 28, 1997 from \$31 at February 23, 1996. Cash was used in operations due to a significant increase in accounts receivable due to the increase in sales and a decrease in the billings in excess of costs and estimated earnings on uncompleted contracts as more jobs proceeded through their production cycle. The cash used in operations was offset by the positive impact of non-cash expenditures and a significant increase in customer deposits.

Non-cash expenditures included fixed asset depreciation and capitalized software (\$1,215), amortization of deferred finance charges associated with the aforementioned 1996 refinancing (\$202), and an increase in receivable and inventory reserves (\$769). Customer deposits increased at year-end, reflecting a significant level of fourth-quarter job bookings.

Partial offsets to the increased cash flow were an increase in accounts receivable (\$3,755), reflecting a higher level of sales in the fourth quarter, continued payments under two settlement agreements (\$530), and a decrease in billings in excess of costs on uncompleted long-term contracts, as some larger contracts entered the production cycle.

Cash used in investing activities decreased as a result of lower capitalization of software costs and fewer equipment acquisitions.

Cash from financing was positive. The 1997 financing was

short-term loans from affiliated parties of \$1,300, that more than offset bank repayments of \$775.

The Company has recorded approximately \$2.9 million in unbilled costs subject to negotiation, which includes contract costs through October 1995 and which may not be received in full during fiscal 1998. This amount includes claims made against the U.S. Government involving a U.S. Navy gyrolab contract and a large centrifuge contract. Additionally, the Company is currently reviewing expenditures through October 1996 on the Navy centrifuge contract to determine which, if any, will be added to the existing claims with the U.S. Government. Such claims are customary in U.S. Government contracts. To the extent the Company is unsuccessful in further recovering contract costs, such an event could have a material adverse effect on the Company's liquidity and results of operations. Historically, the Company has had good experience in that recoveries against the U.S. Government have exceeded claims.

During the year ended February 28, 1997, the Company's principal sources of cash were customers' advance deposits and loans from affiliates. These funds were primarily used to support an increase in accounts receivable, a reduction in billings in excess of costs on long-term contracts, and repayments under the bank line of credit.

Backlog

The Company's sales backlog at February 28, 1997 and February 23, 1996 for work to be performed and revenue to be recognized under written agreements after such dates was approximately \$25.8 million and \$20.9 million, respectively. In addition, the Company's training and maintenance contracts backlog at February 28, 1997 and February 23, 1996 for work to be performed and revenue to be recognized after that date under written agreements was approximately \$5.1 million and \$2.1 million, respectively. Of the 1997 backlog, approximately \$21.9 million is under contracts for aircrew training systems and maintenance support principally for U.S. (approximately \$300) and foreign governments (approximately \$19.0 million). The U.S. Government contracts are subject to termination at the convenience of the Government with equitable cancellation cost recovery. Approximately 80% of the 1997 backlog is expected to be completed prior to February 27, 1998. Subsequent to year-end, on May 1, 1997 the Company announced receipt of the largest contract in its 28-year history. The Ministry of Defense of the United Kingdom awarded the Company a \$21.3 million contract for the design, manufacture, installation and long-term maintenance support of a training and human research centrifuge which will be located at the Royal Air Force Base at Henlow, Bedfordshire, England.

Market for the Registrant's Common Stock and Related Security Holder Matters

The Company's Common Stock (the "Common Stock") is traded on the American Stock Exchange under the symbol ETC. As of June 6, 1997, the Company had 392 shareholders of record.

The following table sets forth the quarterly ranges of high and low sale prices, and the closing sale price, for shares of the Common Stock for the periods indicated. Such prices represent quotations between dealers and do not include mark-ups, mark-downs or commissions, and may not necessarily represent actual transactions.

1997	High	Low	Sale Price
First Quarter	\$ 8-1/2	\$ 3	\$ 5-5/16
Second Quarter	5-7/8	4-1/2	5-5/8
Third Quarter	8	5-5/8	6-3/8
Fourth Quarter	7-1/2	6	6-5/8
1996			
First Quarter Second Quarter Third Quarter Fourth Quarter	3-7/8	2-1/2	2-3/4
	3-5/8	2-3/4	3-1/8
	3	2-1/4	2-13/16
	4-1/8	2-5/16	3-1/2

The Company has not paid any cash dividends on the Common Stock in the past and does not anticipate that any cash dividends will be declared or paid in the foreseeable future. The Company's current line of credit facility prohibits the payment of any dividends by the Company without the lender's prior written consent.

Consolidated Balance Sheets
(\$ in thousands)

	February 28, 1997	February 23, 1996
ASSETS Cash and cash equivalents Cash equivalents restricted for letters	\$ 189	\$ 31
of credit Accounts receivable, net Costs and estimated earnings in excess of	665 11,352	859 7,710
billings on uncompleted long-term contracts Inventories Prepaid expenses and other current assets	3,345 2,719 92	4,024 3,611 556
Total current assets	18,362	16,791
Property, plant, and equipment, at cost, net Software development costs, net of accumulated amortization of \$3,244 and \$2,563 in 1997	2,480	2,498
and 1996, respectively Other assets	1,430 37	1,617 20
Total assets	\$22 , 309	\$20 , 926
LIABILITIES Current portion of long-term obligations Convertible notes payable - related parties Accounts payable - trade Billings in excess of costs and estimated	\$ 119 1,300 1,799	\$ 2,441 - 1,586
earnings on uncompleted long-term contracts Customer deposits Accrued income taxes	2,051 1,746 271	3,355 104 188
Net arbitration awards Other accrued liabilities Total current liabilities	306 1,222 8,814	445 812 8,931
Long-term obligations, less current portion: Credit facility payable to banks Other	6,714 283 6,997	5,214 300 5,514
Deferred income taxes, net	89	370
Total liabilities	15,900	14,815

STOCKHOLDERS' EQUITY Common stock - authorized 10,000,000 shares, \$.10 par value; 2,963,083 and 2,928,944 shares issued and outstanding in 1997 and 1996, respectively 296 293 Capital contributed in excess of par value of common stock 2,007 1,692 Retained earnings 4,106 4,126 Total stockholders' equity 6,409 6,111 Total liabilities and stockholders' equity \$22,309 \$20,926

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

Consolidated Statements of Operations (\$ in thousands, except per share data)

	Year Ended February 28, 1997	Year Ended February 23, 1996
Net sales	\$21,884	\$15,580
Cost of goods sold	16,142	10,374
Gross profit	5,742	5,206
Operating expenses: Selling and administrative Research and development	4,379 167	3,560 154
	4,546	3,714
Operating income	1,196	1,492
Other expenses: Interest expense Letter of credit fees Other, net	1,247 23 34 1,304	925 23 106 1,054
(Loss) income before (benefit) provision for income taxes	(108)	438
(Benefit) provision for income taxes	(88)	139
Net (loss) income	\$ (20)	\$ 299
(Loss) earnings per share (primary and fully diluted)	\$ (.01)	\$.10

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

Consolidated Statements of Changes in Stockholders' Equity (\$ in thousands)

For the years ended February 28, 1997 and February 23, 1996

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			in excess of	
			par value	
	Common	Stock	of common	Retained
	Shares	Amount	stock	earnings
Balance, February 24, 1995	2,906,980	\$291	\$1,618	\$3,827
Net income for the year Shares issued in connection with	-	-	-	299
<pre>employee stock purchase and stock option plans Shares issued in connection with</pre>	3,809	_	11	-
employee stock award	18,155	2	63	
Balance, February 23, 1996	2,928,944	293	1,692	4,126
Net loss for the year Issuance of stock purchase	_	-	-	(20)
warrants	-	-	202	-
Shares issued in connection with employee stock purchase and stock option plans	34,139	3	113	-
Balance, February 28, 1997	2,963,083	\$296	\$2,007	\$4,106

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

Consolidated Statements of Cash Flows
(\$ in thousands)

	Year Ended February 28, 1997	Year Ended February 23, 1996
Cash flows from operating activities:		
Net (loss) income	\$ (20)	\$ 299
Adjustments to reconcile net (loss) income		
to net cash (used in) provided by operating		
activities:		
Depreciation and amortization	1,452	1,006
Increase in allowance for doubtful accounts	s 113	29
(Increase) decrease in assets:		
Accounts receivable	(3 , 755)	1,891
Costs and estimated earnings in excess		
of billings on uncompleted long-term		
contracts	679	(873)
Inventories	606	(467)
Prepaid expenses and other current assets	s 464	(438)
Other assets	(17)	_
(Decrease) increase in liabilities:		
Accounts payable	213	(61)
Billings in excess of costs and estimated	d	
earnings on uncompleted long-term		
contracts	(1,304)	2,012
Customer deposits	1,642	(443)
Accrued income taxes	83	(17)
Net arbitration awards	241	_
Other accrued liabilities	410	(104)
Payments under settlement agreements	(530)	(353)
(Decrease) increase in deferred income tax	es (281)	118
Net cash (used in) provided by		
operating activities	(4)	2,599

Cash flows from investing activities:

Acquisition of equipment Software development costs capitalized	(231) (494)	(314) (696)
Decrease in cash surrender value of insurance	(131)	(030)
policy	_	43
Net cash used in investing activities	(725)	(967)
Cash flows from financing activities:		
Net payments under credit facility	(775)	(1,450)
Decrease (increase) in cash equivalents		
restricted for letters of credit	194	(267)
Increase in notes payable - related party	1,300	2
Increase in other long-term obligations	68	_
Net principal payments of other long-term debt	(16)	(28)
Proceeds from issuance of common stock	116	76
Net cash provided by (used in)		
financing activities	887	(1,667)
Net increase (decrease) in cash and		
cash equivalents	158	(35)
Cash and cash equivalents at beginning of year	31	66
Cash and cash equivalents at end of year	\$ 189	\$ 31
Supplemental schedule of cash flow information:		
Interest paid	\$ 940	\$ 881
Income taxes paid	100	38

Supplemental information on noncash operating and investing activities:

The Company transferred \$286 of inventory to property, plant, and equipment during the year ended February 28, 1997.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (\$ in thousands, except per share amounts)

1. Summary of Significant Accounting Policies:

Nature of Business:

The Company is primarily engaged in the development and manufacture of aircrew and disaster simulation training systems, sterilizers, and environmental systems. The Company focuses on product extension and new product development. Sales of aircrew training systems are made principally to U.S. and foreign governmental agencies. Sales of sterilizers and environmental systems are made to commercial and governmental entities worldwide.

Principles of Consolidation:

The consolidated financial statements include the accounts of Environmental Tectonics Corporation (the Company) and its wholly-owned subsidiary, ETC International Corporation. All material intercompany accounts and transactions have been eliminated. The Company's fiscal year is the 52- or 53-week annual accounting period ending the last Friday in February.

Use of Estimates:

In preparing financial statements in conformity with generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the

disclosure of contingent assets and liabilities at the date of the financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include revenue recognition under the percentage of completion method (see Note 1, Revenue Recognition), claims receivable, inventory, and computer software costs.

The Company has recorded approximately \$2.9 million in claims receivable for contract costs incurred through February 28, 1997 (see Note 2), which are subject to negotiation and audit by the U.S. and foreign governments. To the extent the Company is unsuccessful in realizing these claims, there could be a material adverse effect on the Company's liquidity and results of operations.

Subsequent to February 28, 1997, \$284 was awarded to one of the Company's subcontractors in the Navy CFET project for various work performed in the building part of the project. The Company is currently reviewing the arbitration costs as well as additional expenditures made through October 1996 on the CFET project to determine which, if any, will be added to the existing claims with the U.S. Government.

Revenue Recognition:

Revenue is recognized on long-term contracts utilizing the percentage of completion method based on costs incurred as a percentage of estimated total costs. Revenue recognized on uncompleted long-term contracts in excess of amounts billed to customers is reflected as an asset. Amounts billed to customers in excess of revenue recognized on uncompleted long-term contracts is reflected as a liability. When it is estimated that a contract will result in a loss, the entire amount of the loss is accrued. The effect of revisions in cost and profit estimates for long-term contracts is reflected in the accounting period in which the facts requiring the revisions become known. The effect of revisions in estimates of contract revenues was to increase net loss before tax by approximately \$406 and decrease net income before tax by approximately \$83 in fiscal 1997 and 1996, respectively. Contract progress billings are based upon contract provisions for customer advance payments, contract costs incurred, and completion of specified contract objectives. Contracts may provide for customer retainage of a portion of amounts billed until contract completion. Retainage is generally due within one year of completion of the contract. Revenue for service contracts is recognized ratably over the life of the contract; related material costs are expensed as incurred.

Cash and Cash Equivalents:

Cash and cash equivalents include short-term deposits at market interest rates with original maturities of three months or less. The Company maintains cash balances at several financial institutions located in the Northeast. Accounts in each institution are insured by the Federal Deposit Insurance Corporation up to \$100. Uninsured balances aggregate to \$245 at February 28, 1997.

Inventories:

Inventories are valued at the lower of cost or market. Cost is determined principally by the first-in, first-out method. The costs of finished goods and work-in-process inventories include material, direct engineering, manufacturing labor, and overhead components. The Company periodically reviews

the inventory and, if necessary, writes down the recorded costs. During the fourth quarter of fiscal year 1997, the Company determined that a write-down adjustment of approximately \$556 was necessary on certain slow moving products.

Depreciation of Property, Plant, and Equipment:

Property, plant, and equipment are depreciated over their estimated useful lives by the straight-line method for financial reporting purposes. Accelerated depreciation methods are used for tax purposes. Upon sale or retirement of property, plant, and equipment, the costs and related accumulated depreciation are eliminated from the accounts. Any resulting gains or losses are included in the determination of net income. During the fourth quarter of 1997, the Company transferred from inventory to fixed assets a demonstrator unit and recorded \$143 of additional depreciation expense.

Amortization of Capitalized Software Development Costs:

The Company capitalizes the qualifying costs of developing software contained in certain products. Capitalization of costs requires that technological feasibility has been established. When the software is fully documented and tested, capitalization of development costs cease and amortization commences over a period ranging from 36 to 60 months (dependent upon the life of the product) on a straight-line basis which, at a minimum, approximates estimated sales.

Realization of capitalized software costs is subject to the Company's ability to market the related product in the future and generate cash flows to support future operation.

Capitalized software costs and related amortization totalled \$494 and \$681 for the year ended February 28, 1997. Capitalized software costs and related amortization totalled \$696 and \$573 during the year ended February 23, 1996. During 1997, the Company reevaluated the amortization period of costs associated with a certain product and, as a result, an additional \$109 was expensed during the fourth quarter of 1997.

Amortization of Deferred Financing Costs:

Capitalized costs relating to the acquisition of the Company's credit facility are amortized over the term of the credit facility. Amortization expense relating to deferred financing costs was \$202 and \$3 in 1997 and 1996, respectively.

Amortization of Discount on Settlement Payable:

The discount on settlement payable related to a products liability settlement, the liability that was recognized in fiscal 1996, is amortized over the term of the note. Amortization expense was \$34 and \$55 in fiscal 1997 and 1996, respectively.

Income Taxes:

The Company accounts for income taxes using the liability method, which reflects the impact of temporary differences between values recorded for assets and liabilities for financial reporting purposes and values utilized for measurement in accordance with tax laws.

Long-Lived Assets:

The Company has adopted Statement of Financial Accounting Standards (SFAS) No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," which provides guidance on when to recognize and how to measure impairment losses of long-lived assets and certain identifiable intangibles and how to value long-lived assets to be disposed of. The adoption of SFAS No. 121 had no material effect on the Company's consolidated financial position or results of operations.

Stock Options:

The Company has adopted SFAS No. 123, "Accounting for Stock-Based Compensation," which contains a fair value-based method for valuing stock-based compensation that entities may use, which measures compensation cost at the grant date based on the fair value of the award. Compensation is then recognized over the service period, which is usually the vesting period. Alternatively, the standard permits entities to continue accounting for employee stock options and similar instruments under Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees." Entities that continue to account for stock options using APB Opinion No. 25 are required to make pro forma disclosures of net income and earnings per share, as if the fair value-based method of accounting defined in SFAS No. 123 had been applied. The Company's Incentive Stock Option Plan is accounted for under APB Opinion No. 25.

Advertising and Trade Shows Costs:

The Company expenses advertising costs as incurred. Advertising and trade show expense was \$189 and \$83 for the years ended February 28, 1997 and February 23, 1996, respectively.

(Loss) Earnings Per Common Share:

(Loss) earnings per common share in 1997 and 1996 are based on net income divided by the weighted average number of common shares and common stock equivalent shares (shares issuable upon the exercise of stock purchase warrants and options, unless anti-dilutive) outstanding. The weighted average number of common shares and common stock equivalent shares outstanding was 2,965,000 and 2,935,000 in 1997 and 1996, respectively.

The Financial Accounting Standards Board has issued SFAS No. 128, "Earnings Per Share," which is effective for financial statements issued after December 15, 1997. The new standard eliminates primary and fully diluted earnings per share and requires presentation of basic and diluted earnings per share together with disclosure of how the per share amounts were computed. Basic earnings per share excludes dilution and is computed by dividing income available to common shareholders by the weighted average common shares outstanding for the period. Diluted earnings per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised and converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity. Due to the antidilutive effect resulting from the loss, the adoption of this standard will not effect earnings per share for the year ended February 28, 1997.

Reclassifications:

Certain reclassifications have been made to the 1996 financial statements to conform with the 1997 presentation.

2. Accounts Receivable:

The components of accounts receivable at February 28, 1997 and February 23, 1996 are as follows:

	1997	1996
U.S. Government receivables billed and unbilled contract costs subject to		
negotiation	\$ 5,284	\$ 3,848
U.S. commercial receivables billed	2,477	746
International receivables billed	3,828	3,240
	11,589	7,834
Less allowance for doubtful accounts	(237)	(124)
	\$11 , 352	\$ 7,710

U.S. Government receivables billed and unbilled contract costs subject to negotiation:

Unbilled contract costs subject to negotiation represent claims made or to be made against the U.S. Government under a contract for a centrifuge. These costs were recorded during fiscal years 1994 and 1995. The Company has recorded claims, amounting to \$2.6 million, to the extent of contract costs incurred. These costs have been incurred in connection with U.S. Government-caused delays, errors in specifications and designs, and other unanticipated causes and may not be received in full during fiscal 1998. In accordance with generally accepted accounting principles, revenue recorded by the Company from a claim does not exceed the incurred contract costs related to the claim. The Company currently has approximately \$8.6 million in claims filed with the U.S. Government. The U.S. Government has responded to the claims with either denials or deemed denials which the Company has appealed. Additionally, the Company is now reviewing expenditures from November 1995 through October 1996 to determine what, if any, additional amounts can be filed as a supplemental claim. Such claims are subject to negotiation and audit by the U.S. Government.

In November 1996, the Company invoiced the balance due under the centrifuge contract; at February 28, 1997, approximately \$1.7 million was included in U.S. Government receivables.

Collectibility of these amounts may be dependent upon the resolution of the above claims.

International receivables billed:

International receivables billed includes \$1.3 million related to an arbitration award resulting from certain claims made against a foreign government (see Note 12).

Costs and Estimated Earnings on Uncompleted Contracts:

The following is a summary of long-term contracts in progress at February 28, 1997 and February 23, 1996:

Costs incurred on uncompleted long-term contracts	\$12 , 539	\$19,538
Estimated earnings		7,406
Less billings to date		26,944 (26,275)
Less billings to date	(10,732)	(20/2/3)
	\$ 1,294	\$ 669
	1997	1006
Included in accompanying balance	1991	1990
sheets under the following captions:		
Costs and estimated earnings in excess		
of billings on uncompleted long-term contracts	\$ 3,345	\$ 4,024
Billings in excess of costs and		
estimated earnings on uncompleted long-term contracts	(2,051)	(3,355)
	\$ 1,294	\$ 669

Included in billings in excess of costs and estimated earnings on uncompleted long-term contracts is a provision for anticipated losses on contracts of \$163 and \$72 in 1997 and 1996, respectively.

4. Inventories:

Inventories consist of the following:

	Raw material	Work in process	Total
February 28, February 23,	\$417 696	\$2,302 2,915	\$2,719 3,611

Inventory is presented net of a write-down of \$756 and \$100 in 1997 and 1996, respectively.

5. Property, Plant, and Equipment:

The following is a summary of property, plant, and equipment, at cost, and estimated useful lives at February 28, 1997 and February 23, 1996:

	1997	1996	Estimated useful lives
Land Building and building additions Machinery and equipment Office furniture and equipment Building improvements	\$ 100 1,811 5,288 727 812	\$ 100 1,811 4,793 716 812	40 years 3-5 years 10 years 5-10 years
Less accumulated depreciation Property, plant, and equipment, net	8,738 (6,258) \$ 2,480	8,232 (5,734) \$ 2,498	

Depreciation expense for the years ended February 28, 1997 and February 23, 1996 was \$536 and \$375, respectively.

6. Long-Term Obligation and Credit Arrangements:

Long-term obligations at February 28, 1997 and February 23, 1996 consist of the following:

	1997	1996
Credit facility payable to bank due March 31, 1997 (a) Products liability settlement (net of unamortized discount of \$139 and \$173,	\$6,714	\$7,489
respectively, based on imputed rate of 11%) (b) Term loans payable accruing interest between 9.0% and 9.9% collateralized by	306	422
priority liens on certain equipment	96	44
	7,116	7,955
Less current portion	(119)	(2,441)
	\$6,997	\$5,514

(a) At February 28, 1997, the Company had a revolving credit facility with a bank which provided financing of up to an aggregate of \$7.7 million, expiring on March 31, 1997. The proceeds from the credit facility were utilized to provide working capital financing and to support the issuance of letters of credit. The credit facility included certain covenants related to, among other things, prohibitions on the payment of cash dividends, minimum tangible net worth requirements, and various financial ratios. The credit facility is collateralized by substantially all assets of the Company.

Direct borrowings under the credit facility were limited to the lesser of \$7.5 million or the Company's borrowing base as calculated pursuant to the terms of the agreement (approximately \$7.8 million borrowing base at February 28, 1997). The letter of credit sublimit was \$7 million. At February 28, 1997, there were \$665 letters of credit outstanding (of which approximately \$464 were cash collateralized), exclusive of a \$1.1 million letter of credit for the RTAF which was drawn against in the first quarter of fiscal 1995 (see Note 12). Interest is charged on direct borrowings at the bank's prime rate plus 2.0%. The interest rate was 10.25% at February 28, 1997 and February 23, 1996. The Company was required to pay a commitment fee of 0.5% per annum on the average unused balance. Fees on letters of credit outstanding were 2.0% per year.

The approximate average loan balance, maximum aggregate borrowings outstanding at any month-end payable to banks during the fiscal years, and weighted average interest rate computed by the days outstanding method are as follows:

Approximate average loan balance \$ 7,131 \$ 8,189

Maximum aggregate borrowings outstand-

\$ 7,489

\$ 8,938

Weighted average interest rate 10.60% 10.33%

ing at any month-end

As a condition to the issuance of the original credit facility, warrants to purchase 100,000 shares of the Company's common stock at \$5.00 per share were issued on November 20, 1990. These warrants expired on November 20, 1995. As a condition to the extension of the credit facility through March 31, 1997, warrants were issued to purchase 100,000 shares of the Company's common stock at a price equal of \$5.18. The warrants will be exercisable through 2001. If the holder desires to sell or transfer any of its warrants, the Company has the right of first refusal. A deferred charge of \$202 was assigned to the warrants and amortized to profit and loss during the year ended February 28, 1997. Warrants issued provide for adjustments of the exercise price and the number of shares issuable thereunder in the event that the Company issues additional shares of common stock or rights to purchase common stock at a price less than the current warrant price or current market price, whichever is greater. The Company has agreed to file a registration statement with the Securities and Exchange Commission to register the common stock issuable upon exercise of the warrants. If the Registration Statement is not effective prior to July 15, 1997, the Company will forfeit a \$375 escrow to the bank.

On March 27, 1997, the Company executed an agreement (the "Credit Agreement") with a bank establishing a revolving credit facility of \$10 million through May 31, 1998, at which time the facility is reduced to \$9 million. The facility bears interest at the bank's base rate or adjusted Libor and expires on May 31, 1999. The credit facility includes certain covenants related to, among other things, prohibitions on incurring additional debt, change in ownership of certain officers, payment of dividends and certain financial ratio requirements. The credit facility is collateralized by substantially all of the assets of the Company.

Because of write-downs of certain inventory and other year-end adjustments that resulted in the Company recognizing a net loss of \$20 for the fiscal year ended February 28, 1997, as of June 6, 1997, the bank has made all credit availability under the Credit Agreement subject to specific prior approval by the bank pending a review of the Company's financial condition. The Company believes this restriction will be temporary.

Additionally, the Company issued \$4 million of subordinated debentures, bearing interest at 12% per annum, due March 27, 2004. In connection with the subordinated debentures, warrants were issued to acquire 166,410 shares of the Company's common stock at an exercise price of \$1.00 per share; proceeds from the debentures will be allocated to the warrants and charged to income over the term of the debentures. The Company also issued 25,000 shares of 11%, \$100 face value, convertible preferred stock for \$2.5 million. Each share of preferred stock is convertible, at the

option of the shareholder, into 13.33 shares of the Company's common stock at a price of \$7.50 per share.

The proceeds from these transactions were used to repay amounts outstanding under the existing credit facility at February 28, 1997. Accordingly, the current amounts refinanced have been reclassified as long-term obligations.

(b) During June 1995, the Company entered into a settlement with the employee of a customer who brought a products liability claim against the Company. The settlement of \$1,195 will be satisfied with (i) funds of \$547 (including accrued interest) previously deposited by the Company's products liability insurance carrier with the U.S. District Court, and (ii) a settlement payable to the plaintiff for the remaining amount of \$648. The Company paid \$53 by July 20, 1995 and \$100 on April 20, 1996. In September 1996, the Company renegotiated the payment schedule. For the period from October 1996 to September 1997, the Company will pay \$10 per month. Beginning October 1997, the Company will pay \$5 per month until the obligation is satisfied. The claimant did reserve the right to pursue additional payment amounts as per the original settlement agreement of July 29, 1995. The Company has recorded a discount of \$207 on this settlement based on an imputed interest rate of 11%, which will be amortized over the term of the settlement.

The amount of long-term obligations maturing in each of the next five fiscal years is \$95 in 1998; \$60 in 1999; \$60 in 2000; \$60 in 2001; \$60 in 2002; and \$80 thereafter.

7. Notes Payable - Related Parties:

Notes payable of \$1.3 million represent amounts due from directors, executive officers and their affiliates. Notes payable, due January 1, 1998, bear interest at 10% and are subordinated to the Company's credit facility. The payees have the right to convert the notes into shares of the Company's common stock. The notes are convertible into approximately 108,000 shares, at a price of \$12, if converted on or before June 30, 1997. After June 30, 1997, the notes can be converted at a price which is the greater of \$5 or 75% of the average closing price of the Company's common stock. Subsequent to year-end, the Company repaid \$500 of the outstanding notes payable.

8. Leases:

Operating Leases:

The Company leases certain premises and office equipment under operating leases which expire over the next five years. Future minimum rental payments required under noncancellable operating leases having a remaining term expiring after one fiscal year as of February 28, 1997 are \$18 in 1998; \$15 in 1999; \$14 in 2000; \$12 in 2001; and \$2 in 2002.

Total rental expense for all operating leases for the years ended February 28, 1997 and February 23, 1996 was approximately \$197 and \$219, respectively.

9. Income Taxes:

The components of the (benefit) provision for income taxes

	Februa	Year Ended February 28, 1997		Ended ary 28, 996
Current payable:				
Federal	\$	190	\$	21
State		3		-
		193		21
Deferred:				
Federal		(233)		72
State		(48)		46
		(281)		118
	\$	(88)	\$	139

A reconciliation of the statutory federal income tax (benefit) to the effective tax is as follows:

	Year Ended February 28, 1997	Year Ended February 28, 1996
Statutory income tax State income tax, net of federal tax	(34.0)%	34.0%
benefit	(1.7)	8.8
Foreign sales corporation	(63.9)	(13.8)
Other	18.1	2.7
	(81.5)%	31.7%

The tax effects of the primary temporary differences giving rise to the Company's net deferred tax liability for the years ended February 28, 1997 and February 23, 1996 are as follows:

	1	.997	1	996
Deferred tax liabilities:				
Amortization of capitalized software	\$	539	\$	629
Depreciation		336		371
Other, net		-		4
		875	1	,004
Deferred tax assets:				
Net arbitration award against Company		127		174
Net products liability settlement		116		165
Vacation reserve		48		71
Inventory reserve		285		39
Receivable reserve		89		74
Warranty reserve		44		111
Other, net		77		-
		786		634
Net deferred tax liability	\$	89	\$	370

10. Business Segment Information:

The Company primarily manufactures, under contract, various types of high technology equipment which it has also

designed and developed. A significant portion of the equipment is sold directly or through distributors to foreign markets. Except for the foreign sales activity and certain operations and maintenance contracts, all operations of the Company are conducted in the United States. Information on the Company's industry segments is as follows:

	Year Ended February 28, 1997	
Net sales: Aircrew Training Systems Sterilizers Environmental Systems and other	\$ 13,247 6,213 2,424	\$ 8,038 4,762 2,780
Total	\$ 21,884	\$ 15,580
Operating income (loss)(1): Aircrew Training Systems Sterilizers Environmental Systems and other	\$ 2,153 151 (455) 1,849	\$ 2,240 (232) (118) 1,890
General corporate expenses Operating income	(653) 1 , 196	(398) 1,492
Interest expense Letter of credit fees Other, net	(1,247) (23) (34)	(925) (23) (106)
(Loss) income before income taxes	\$ (108)	\$ 438
Identifiable assets: Aircrew Training Systems Sterilizers Environmental Systems and other Corporate assets	\$ 14,071 3,819 1,093 3,326	\$ 14,154 2,376 1,417 2,979
Total assets	\$ 22,309	\$ 20,926

- (1) Included in operating income (loss) in fiscal 1997 are \$556 for inventory write-downs, \$143 for additional depreciation recorded on a demonstrator unit transferred from inventory to fixed assets, \$284 for a reserve for an arbitration settlement related to the Company's government claims awarded after fiscal year-end, and additional amortization expense of \$109 for capitalized software.
- 10. Business Segment Information (Continued):

Operating income (loss) consists of net sales less applicable costs and expenses relating to these revenues. General corporate expenses, letter of credit fees, interest expense, other expenses, and income taxes have been excluded from the determination of segment operating income (loss). General corporate expenses are primarily central administrative office expenses. Property, plant, and equipment and, accordingly, depreciation and capital expenditures are not identifiable with specific business segments because most of these assets are used in each of the segments.

Approximately 17% and 11% of sales in 1997 were made to two international customers, totalling sales of \$3,826 and

\$2,527, respectively, in the Aircrew Training Systems segment. Approximately 15% of sales in 1996 were made to one international customer, totalling sales of \$2,366 in the Aircrew Training Systems segment.

Included in the segment information for the year ended February 28, 1997 are export sales of approximately \$15,422. Of these amounts, there are sales to or relating to the Governments of United Kingdom (\$3,826), Japan (\$2,527), China (\$1,969), Tunisia (\$684) and Egypt (\$483) for the sale of the Aircrew Training Systems segment. Sales to the U.S. Government and its agencies aggregate approximately \$2,082 for the year ended February 28, 1997.

Included in the segment information for the year ended February 23, 1996 are export sales of approximately \$9,198. Of these amounts, there are sales to or relating to the Governments of Japan (\$559), Bangladesh (\$602) and the United Kingdom (\$2,366) for the sale of Aircrew Training equipment. Sales to the U.S. Government and its agencies aggregate approximately \$1,631 for the year ended February 23, 1996.

11. Stock Options:

The Company has a fixed Incentive Stock Option Plan (the Plan) accounted for under APB Opinion No. 25 and related Interpretations. The Plan allows the Company to grant options to employees for up to 500,000 shares of common stock and will terminate on August 24, 1998. The options, which have a term of 10 years when issued, vest over a four-year period. The exercise price of each option shall not be less than 100% of the current market price of the Company's stock on the date of grant. Accordingly, no compensation cost has been recognized for the Plan. Had compensation cost for the Plan been determined based on the fair value of the options at the grant dates consistent with the method of SFAS No. 123, the Company's net income and earnings per share would have been reduced to the pro forma amounts indicated below.

		1997	1996
Net (loss) income	As reported	\$(20)	\$299
	Pro forma	\$(37)	\$299
Primary and fully diluted earnings per share	As reported	\$(.01)	.10
	Pro forma	\$(.01)	.10

The fair value of each option grant is estimated on the date of grant using the Black-Scholes options-pricing model with the following weighted average assumptions used for grants in 1997: dividend yield of 0%; expected volatility of 60%; risk-free interest rate of 6.2%%; and expected life of four years.

A summary of the status of the Plan as of February 28, 1997 and February 23, 1996, and changes during the years ending on those dates is presented below.

	1997	
		Weighted
		average
		exercise
Shares		price

Outstanding at beginning of year	79,550	\$ 3.19	102,450	\$ 3.24
Granted	54,900	4.33	-	-
Exercised	(32,040)	3.30	-	-
Forfeited	(3,600)	4.25	(22,900)	3.19
Outstanding at end of year	98,810	3.75	79,550	3.19
Options exercisable at year end Weighted average fair value of options	48,635			
granted during the year		\$ 2.29		\$ -

The following information applies to options outstanding at February 28, 1997:

Number outstanding	98,810
Range of exercise prices	\$2.25 to \$4.50
Weighted average exercise price	\$3.75
Weighted average remaining contractual	
life	6.6 years

12. Claims and Litigation:

In October 1993, the Company was notified by the Royal Thai Air Force ("RTAF") that the RTAF was terminating a certain \$4.6 million simulator contract with the Company. Although the Company had performed in excess of 90% of the contract, the RTAF alleged a failure to completely perform. In connection with this termination, the RTAF made a call on a \$229 performance bond, as well as a draw on approximately \$1.1 million of advance payment letters of credit. Work under this contract had stopped while under arbitration, but on October 1, 1996, the Thai Trade Arbitration Counsel rendered its decision under which the contract was reinstated in full and the Company was given a period of nine months to complete the remainder of the work. Upon completion of the contract, the RTAF will pay the Company the open receivables balance, consisting of the performance bond and the advance payment, plus the 10% due on the balance of the contract. Except as noted in the award, the rights and obligations of the parties remain as per the original contract. Should the Company fail to perform under the contract in the time period allotted, the RTAF could invoke penalties against the Company, including termination of the contract and delay penalties. Based on the progress to date and recent discussions with the RTAF, the Company estimates it will probably exceed the nine-month contract completion period due to an extended delay in obtaining an export license for certain hardware required to complete the job. This license has been cleared and the hardware is in the country. The Company has submitted a request for a contract extension under the "force majeure" clause of the RTAF contract, and the customer has agreed to an extension to complete the installation and training.

A lawsuit was commenced against the Company in April 1997 in the United States District Court for the District of Puerto Rico by an employee of a customer who claims to have been injured as a result of an alleged malfunction of a sterilizer manufactured by the Company. The plaintiff is seeking \$3 million in damages. The Company has up to \$10 million of products liability coverage, subject to a \$100 deductible. The outcome of this litigation is not currently predictable.

Certain other claims, suits, and complaints arising in the ordinary course of business have been filed or are pending against the Company. In the opinion of management, after consultation with legal counsel, all such matters are

reserved for or adequately covered by insurance or, if not so covered, are without merit or are of such kind, or involve such amounts, as would not have a significant effect on the financial position or results of operations of the Company if disposed of unfavorably.

13. Related Party Transactions:

The Company transacts certain business in Europe through Environmental Tectonics Corporation (Europe) Ltd., (ETC Europe), an affiliated entity which is 99% owned by the president of the Company. ETC Europe provides certain marketing and administrative services relating to European sales and maintenance contracts. Administrative fees paid to ETC Europe were approximately \$45 and \$80 for the years ended February 28, 1997 and February 23, 1996, respectively.

14. Employee Benefit Plan

The Company maintains a retirement savings 401(k) plan for eligible employees. The Company's contributions to the plan are based on a percentage of the employees' qualifying contributions. The Company's contributions totalled \$83 and \$88 in 1997 and 1996, respectively.

From time to time, the Company had not made employee contribution payments to the trustee of its employee benefit plan concurrent with payroll payments to such employees. The Company is now making these payments concurrent with its payroll. By reason of such past late payments, the Company may be subject to certain additional interest and taxes as well as potential penalties.

15. Quarterly Consolidated Financial Information (Unaudited):

Financial data for the interim periods of 1997 and 1996 were as follows:

	Quarter Ended			
	May	August	November	February
	31	30	29	28
Net sales Gross profit	\$4,509 1,395	\$4,897 1,582	\$5,568 1,774	\$ 6,910 991
Operating income (loss) Income (loss) before income	439	581	703	(527)
taxes	175	255	421	(959)
Net income (loss)	120	172	287	(599)
Earnings (loss) per common shares and common stock				
equivalent shares	\$.04	\$.06	\$.09	\$ (.20)
	Quarter Ended			
	May	August	November	February
	26	25	24	23
Net sales	\$3,712	\$3 , 559	\$4,087	\$ 4,222
Gross profit	1,426	1,251	1,270	1,259
Operating income	330	300	447	415
Income before income taxes	109	69	165	95
Net income	70	45	107	77
Earnings per common shares and common stock equiva-	, 0	13	107	, ,
lent shares	\$.02	\$.02	\$.04	\$.02

16. Fourth-Quarter Adjustments:

The Company recorded the following significant fourth quarter adjustments:

- (1) \$556 or \$.12 per share was charged to cost of goods sold which related to the write-down of certain slowmoving products.
- (2) \$284 or \$.06 per share was to record an arbitration settlement awarded after the fiscal year ended February 28, 1997.
- (3) \$109 or \$.03 per share was the result of reevaluation of the amortization period of costs associated with capitalized software of a certain product.
- (4) \$143 or \$.03 per share was a charge to depreciation for an inventory item transferred from inventory to property, plant, and equipment.

Report of Independent Certified Public Accountants

Board of Directors
Environmental Tectonics Corporation

We have audited the accompanying consolidated balance sheets of Environmental Tectonics Corporation and Subsidiary as of February 28, 1997 and February 23, 1996, and the related consolidated statements of operations, changes in stockholders' equity and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

As discussed in Note 1 to the consolidated financial statements, the Company has recorded receivables in the amount of \$2.9 million for claims made to or against the United States and foreign governments for contract costs incurred through February 28, 1997. The total net claims amount made and to be made are approximately \$8.6 million based on costs incurred through February 28, 1997 and are subject to negotiation, arbitration, and audit by the United States and foreign governments.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Environmental Tectonics Corporation and Subsidiary as of February 28, 1997 and February 23, 1996, and the consolidated results of their operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

/s/Grant Thornton LLP

Philadelphia, Pennsylvania June 9, 1997 EXHIBIT 21

List of Subsidiaries

Jurisdiction in Percent of Company's Name of Entity Which Organized Equity Interest

ETC International Corp. U.S. Virgin Islands 100%

Consent of Independent Certified Public Accountants

We have issued our report dated June 9, 1997, accompanying the consolidated financial statements incorporated by reference or included in the Annual Report of Environmental Tectonics Corporation and Subsidiary on Form 10-KSB for the year ended February 28, 1997. We hereby consent to the incorporation by reference of said report in the Registration Statement of Environmental Tectonics Corporation and Subsidiary on Form S-8 (File No. 2-92407, effective August 14, 1984) and on Form S-3 (File No. 33-42219, effective September 4, 1991).

GRANT THORNTON LLP

/s/ Grant Thornton LLP

Philadelphia, Pennsylvania June 12, 1997

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