MAR 31 1994

License No: 20-02237-04
Docket No: 030-10763
Control No: 113624

Varian Associates, Inc.
ATTN: Arlyne Gittens
Insurance Analyst
P.O. Box 10800
Palo Alto, California 94303-0883

Dear Ms. Gittens:

Subject: FINANCIAL ASSURANCE FOR DECOMMISSIONING

This is in reference to your various submittals dated October 19, 1990, October 8, 1993, August 10, 1993 and February 18, 1994 to provide financial assurance for License No. 20-02237-04. We have reviewed these documents and have no further questions at this time.

Based on the information provided in the above referenced documents, you are presently in compliance with the financial assurance requirements outlined in the decommissioning rule in 10 CFR 30.35.

If you have any questions, please contact Anthony Dimitriadis, of my staff, at (610) 337-6953.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:
Mohamed M. Shanbaky

Mohamed M. Shanbaky, Chief
Research and Development Section
Division of Radiation Safety
and Safeguards

cc:
Varian/Beverly Microwave Division
ATTN: John McKinley
Radiation Safety Officer
8 Salem Road
Beverly, Massachusetts 01915

bcc:
M. Shanbaky, RI
A. Dimitriadis, RI

DRSS:RI
Dimitriadis

03/14/94

DRSS:RI
Shanbaky
mS
03/23/94

NOTE TO DMB:

THE ATTACHED DOCUMENTS ARE TO BE PROCESSED AS ONE FINANCIAL ASSURANCE FOR DECOMMISSIONING PACKAGE.

LICENSE NUMBER: 20-02237-04

DOCKET NUMBER: 030-10763

CONTROL NUMBER: 113624

THIS SHEET MAY BE DISCARDED AFTER PROCESSING.

THANK YOU!

MS-16
K-8

varian

February 18, 1994

Mailed Certified,
Return Receipt Requested

Mr. Mohamed M. Shanbaky, Chief
Research and Development Section
Nuclear Regulatory Commission
Region I
Division of Radiation Safety and Safeguards
475 Allendale Road
King of Prussia, PA 19406

Re: Mail Control No.: 113624
License No.: 20-02237-04

Dear Mr. Shanbaky:

This will respond to your letter, dated January 27, 1994, which advised of certain items needed to complete our submittal to you on October 8, 1993 of a Standby Trust Agreement entered into 10-1-93 between Varian Associates, Inc., as Grantor, and The First National Bank of Boston, as Trustee.

In accordance with your request, enclosed please find the following documents, in duplicate, to be attached to the abovementioned Standy Trust Agreement:

1) Specimen Certificate of Events
2) Specimen Certificate of Resolution
3) Schedule B

If you should have any questions concerning the enclosed items, please contact me.

Sincerely,

Arlyne Gittens

Arlyne Gittens
Insurance Analyst
(415)424-5357

Enc.

cc: Mike Grabko; Varian, Beverly, MA - w/enc.
Traci Martin; Corporate Trust Div., Bank of Boston - w/enc.
Paul Norton; Varian, Palo Alto, CA - w/enc.

113624

OFFICIAL RECORD COPY ML 10

FEB 22 1994

Specimen Certificate of Events

Bank of Boston
150 Royal Street
Canton, MA 02021

Attention: Trust Division

Gentlemen:

In accordance with the terms of the Agreement with you dated _________________, I, _________________________, Secretary of Varian Associates, Inc., hereby certify that the following events have occurred:

1. Varian Associates, Inc. is required to commence the decommissioning of its facility located at 150 Sohier Road, Beverly, Massachusetts (hereinafter called the decommissioning).

2. The plans and procedures for the commencement and conduct of the decommissioning have been approved by the United States Nuclear Regulatory Commission, or its successor, on _______________________ (copy of approval attached).

3. The Board of Directors of Varian Associates, Inc. has adopted the attached resolution authorizing the commencement of the decommissioning.

____
Secretary of Varian Associates, Inc.

____
Date

Specimen Certificate of Resolution

I, ________________________________, do hereby certify that I am Secretary of Varian Associates, Inc., a Delaware corporation, and that the resolution below was duly adopted at a meeting of this Corporation's Board of Directors on __________________, 19____.

____
Secretary

RESOLVED, that this Board of Directors hereby authorizes the President, or such other employee of the Company as he may designate, to commence decommissioning activities at Varian Associates, Inc., CF&RPP, in accordance with the terms and conditions described to this Board of Directors at this meeting and with such other terms and conditions as the President shall approve with and upon the advice of Counsel.

SCHEDULE B

Amount: $277,000

As Evidenced By: Payment Surety Bond #5770122,
issued by Safeco Insurance Company of America,
effective August 10, 1993

JAN 27 1994

License No. 20-02237-04
Docket No. 030-10763
Control No. 113624

Varian Associates, Inc.
ATTN: Arlyne Titus
Insurance Analyst
611 Hansen Way
P. O. Box 10800
Palo Alto, California 94303-0883

Dear Ms. Titus:

Subject: Financial Assurance for Decommissioning

This is in reference to your letter dated October 8, 1993, with attached Standby Trust Agreement. Although you utilized the recommended wording found in Regulatory Guide 3.66, certain attached items were not submitted. In order to continue our review, please submit the following:

Submit a Specimen Certificate of Events and Specimen Certificate of Resolution.

Your submittal does not include a specimen Certificate of Events or a Specimen Certificate of Resolution with the Standby Trust Agreement. Section 5 of the Standby Trust Agreement refers to an attached Specimen Certificate of Events. The Specimen Certificate of Events, in turn, is to refer to an attached Certificate of Resolution authorizing the commencement of decommissioning. Please submit the specimen certificates (which should contain blank spaces for dates and signatures until decommissioning activities have commenced). You may use the recommended wording to the specimen certificates on pages 4-24 and 4-25 of *Regulatory Guide* 3.66. The specimen certificates will assist the trustee in evaluating whether a release of funds from the trust is appropriate.

In addition, please submit Schedule B as referred to in Section 4 of your Standby Trust Agreement.

Satisfactory financial assurance is required for your license. Therefore, we request that you respond within 30 calendar days of the date of this letter. Please reply in duplicate to my attention at the Region I office and be sure to submit originally signed documents. You may refer to Mail Control No. 113624.

If you have any questions regarding this letter please call Anthony Dimitriadis of my staff at (215) 337-6953.

Sincerely,

Original Signed By:
Mohamed M. Shanbaky

Mohamed M. Shanbaky, Chief
Research and Development Section
Division of Radiation Safety
and Safeguards

cc:
Varian/Beverly Microwave Division
ATTN: John McKinley
Radiation Safety Officer
8 Salem Road
Beverly, Massachusetts 01915

bcc:
M. Shanbaky, RI
A. Dimitriadis, RI

DRSS:RI	DRSS:RI
Dimitriadis/amw	Shanbaky
	MS
12/16/93	12/20/93

MS 16
K-8

varian

October 8, 1993

Mailed Certified,
Return Receipt Requested

Mr. Anthony Dimitriadis
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Re: Docket No. 030-10763
License No. 20-02237-04
Control No. 113624

Dear Mr. Dimitriadis:

This will respond to your letter dated August 23, 1993, which requested additional information concerning Varian's August 10, 1993 submittal:

1. Describe the means to be used for adjusting cost estimates and associated funding levels over the facility.

   Answer: Varian will satisfy this requirement by, every two years:
   - Adjust cost estimate for inflation
   - Request a Certified Health Physicist consultant to review the current cost estimate and revise as necessary

   Please note the current cost estimate includes a 25% contingency factor above the actual estimated cost.

2. Submit a Standy Trust Agreement and related documents.

   Answer: Enclosed please find the executed Standby Trust Agreement. The surety bond has already been forwarded to your attention under separate cover.

As requested, this response is being forwarded to you in duplicate. If you should have any questions or require additional information or documentation, please feel free to contact me.

Sincerely,

Arlyne Gittens

Arlyne Gittens
Insurance Analyst

Enc.

OFFICIAL RECORD COPY ML 10

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OCT 13 1993

STANDBY TRUST AGREEMENT

TRUST AGREEMENT, the Agreement entered into as of 10-1-93 by and between Varian Associates, Inc., a Delaware corporation, herein referred to as the "Grantor", and The First National Bank of Boston, the "Trustee".

WHEREAS, the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 30. These regulations, applicable to the Grantor, require that a holder of, or an applicant for, a Part 30, 40, 70 or 72 license provide assurance that funds will be available when needed for required decommissioning activities.

WHEREAS, the Grantor has elected to use a surety bond to provide all of such financial assurance for the facilities identified herein; and

WHEREAS, when payment is made under a surety bond, this standby trust shall be used for the receipt of such payment; and

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and Trustee agree as follows:

Section 1. Definitions. As used in this Agreement;

(a) The term "Grantor" means the NRC licensee who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the trustee who enters into this Agreement and any successor Trustee.

Section 2. Costs of Decommissioning. This Agreement pertains to the costs of decommissioning the materials and activities identified in License Number 20-02237-04 issued pursuant to 10 CFR Part 30 as shown in Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund (the Fund) for the benefit of the NRC. The Grantor and the Trustee intend that no third party have access to the Fund except as provided herein.

Section 4. Payments Constituting the Fund. Payments made to the Trustee for the Fund shall consist of cash, securities, or other liquid assets acceptable to the Trustee. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee are referred to as the "Fund", together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount of, or adequacy of the Fund, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the NRC.

Section 5. Payment for Required Activities Specified in the Plan. The Trustee shall make payments from the Fund to the Grantor upon presentation to the Trustee of the following:

a. A certificate duly executed by the Secretary of the Grantor attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate, and

b. A certificate attesting to the following conditions;

(1) that decommissioning is proceeding pursuant to an NRC-approved plan.

(2) that the funds withdrawn will be expended for activities undertaken pursuant to that Plan, and

(3) that the NRC has been given 30 days' prior notice of Varian Associates Inc.'s intent to withdraw funds from the escrow fund.

No withdrawal from the fund can exceed 10% percent of the outstanding balance of the Fund or $27,700.00 dollars, whichever is greater, unless NRC approval is attached.

In the event of the Grantor's default or inability to direct decommissioning activities, the Trustee shall make payments from the Fund as the NRC shall direct, in writing, to provide for the payment of the costs of required activities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the NRC, or State agency, from the Fund for expenditures for required activities in such amounts as the NRC, or State agency, shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the NRC specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 6. Trust Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the Fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80a-2(a)), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal Government, and in obligations of the Federal Government such as GNMA, FNMA, and FHLM bonds and certificates or State and Municipal bonds rated AA or higher by Standard and Poors or Aa or higher by Moody's Investment Services; and

(c) For a reasonable time, not to exceed 60 days, the Trustee is authorized to hold uninvested cash, awaiting investment or distribution, without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.), including one that may be created, managed, underwritten, or to which investment advice is rendered, or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale, as necessary to allow duly authorized withdrawals at the joint request of the Grantor and the NRC or to reinvest in securities at the direction of the Grantor;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name, or in the name of a nominee, and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, to reinvest interest payments and funds from matured and redeemed instruments, to file proper forms concerning securities held in the Fund in a timely fashion with appropriate government agencies, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee or such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the U.S. Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. After payment has been made into this trust fund, the Trustee shall annually, at least 30 days before the anniversary date of receipt of payment into the standby trust fund, furnish to the Grantor and to the NRC a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days before the anniversary date of the establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the NRC, or State agency, shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to the matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting on the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing with the Grantor.

Section 13. Successor Trustee. Upon 90 days notice to the NRC, the Trustee may resign; upon 90 days notice to the NRC and the Trustee, the Grantor may replace the Trustee; but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee and this successor accepts the appointment. The successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the Fund.

If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the NRC or State agency, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are signatories to this agreement or such other designees as the Grantor may designate in writing. The Trustee shall be fully protected in acting without inquiry in accordance with the grantor's orders, requests, and instructions. If the NRC or State agency issues orders, requests, or instructions to the Trustee these shall be in writing, signed by the NRC, or State agency, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, the NRC, or State agency, hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instruction from the Grantor and/or the NRC, or State agency, except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee and the NRC, or State agency, or by the Trustee and the NRC or State Agency, if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the NRC or State agency, or by the Trustee and the NRC or State agency, if the Grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor or its successor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in conncection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the Grantor, the NRC, or State agency, issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the trust fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. This Agreement shall be administered, construed, and enforced according to the laws of the State of Massachusetts.

Section 19. Interpretation and Severability. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement. If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by the respective officers duly authorized and the incorporate seals to be hereunto affixed and attested as of the date first written above.

ATTEST: Grantor: VARIAN ASSOCIATES, INC.

[Seal] by: Allen K. Jones

name/title: Allen K. Jones
Vice President & Treasurer

Trustee: THE FIRST NATIONAL BANK OF BOSTON
as Trustee

[Seal] by: J.E. Mogavero

name/title: J.E. Mogavero Authorized Officer

SCHEDULE A

This Agreement demonstrates financial assurance for the following cost estimates for the following licensed activities:

U.S. NUCLEAR REGULATORY COMMISSION LICENSE NUMBER: 20-02237-04

NAME AND ADDRESS OF LICENSEE: Varian Associates, Inc.
150 Sohier Road
Beverly, MA

ADDRESS OF LICENSED ACTIVITY: 150 Sohier Road
Beverly, MA

COST ESTIMATES FOR REGULATORY ASSURANCES DEMONSTRATED BY THIS AGREEMENT: $277,000

AUG 23 1993

Docket No. 030-10763
License No. 20-02237-04
Control No. 113624

Varian Associates, Inc.
ATTN: Arlyne Titus
Insurance Analyst
611 Hansen Way
P. O. Box 10800
Palo Alto, California 94303-0883

Dear Ms. Titus:

Subject: Financial Assurance for Decommissioning

This is in reference to your submittal dated August 10, 1993 to provide financial assurance for License No. 20-02237-04. We have reviewed your submittal and in order to continue our review, we need the following additional information:

1. **Describe the means to be used for adjusting cost estimates and associated funding levels over the life of the facility.**

   Under 10 CFR 30.35(e), you are required to describe the means you will use to adjust decommissioning cost estimates and funding levels over the life of your facility. You did not provide such a description in your decommissioning funding plan. Regulatory Guide 3.66 provides a method for adjusting the cost estimates.

   Regulatory Guide 3.66 suggests that adjustments be made for inflation and site-specific factors at the time of license renewal or when the amounts/types of material at the facility change. Adjustments should be made to account for inflation, for other changes in prices of goods and services, for changes in facility conditions, and for changes in expected decommissioning procedures.

2. **Submit a Standby Trust Agreement and related documentation.**

   In the event the licensee defaults on its decommissioning obligations, the surety, under the terms of the bond, must make funds available in a trust fund to allow NRC to pay for decommissioning activities. A trust fund must be established because funds paid directly to the NRC must be deposited in the U.S. Treasury and would not be available for decommissioning costs. To avoid the possibility that a trust fund would not be readily available if and when needed, Regulatory Guide 3.66, page 3-19, states that a Standby Trust Agreement must be used with a surety bond. Please submit a

Standby Trust Agreement, acknowledgement, and other related documents as recommended in Regulatory Guide 3.66, pages 4-18 through 4-27. Please submit originally, signed duplicates of these documents.

Satisfactory financial assurance is required for your license. Therefore, we request that you respond within 30 calendar days of the date of this letter.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control No. 113624.

If you have any questions regarding this letter please call Anthony Dimitriadis of my staff at (215) 337-6953.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Research, Development and
Decommissioning
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide 3.66

cc:
Varian/Beverly Microwave Division
ATTN: John McKinley
Radiation Safety Officer
8 Salem Road
Beverly, Massachusetts 01915

bcc:
J. Kinneman
A. Dimitriadis

DRSS:RI	DRSS:RI
Dimitriadis/gc	Kinneman
08/23/93	08/23/93

M&S
K-8

varian

VIA EXPRESS MAIL

030-10763

August 10, 1993

Mr. Anthony Dimitriadis
Research, Development and
Decommissioning Section
Division of Radiation Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Docket No.: 030-10763
License No.: 20-02237-04
Control No.: 113624

Dear Mr. Dimitriadis:

I am writing in response to John Kinneman's letter to Arlyne Titus that was received in Varian's Risk Management Department on June 11, 1993.

In accordance with the 10 CFR part 20, enclosed please find a Decommissioning Funding Plan for Varian's Crossed Field and Receiver Protector Products facility in Beverly, Massachusetts along with a surety bond equal to the decommissioning cost estimate of $277,000.

I trust that Varian is in compliance with the NRC guidelines; however, after review if you should have any questions, please contact me.

Sincerely,

Elisha W. Finney

Elisha W. Finney
Manager, Risk Management & Credit

Enc.

cc: Mike Grabko
Paul Norton
Alan Palter

OFFICIAL RECORD COPY ML 10

113624

AUG 12 1993

Decommissioning Funding Plan

Varian Corporation

Crossed Field and Receiver Protector Products

150 Sohier Road

Beverly, Massachusetts

USNCR Materials License 20-02237-04

August 5, 1993

DECOMMISSIONING FUNDING PLAN

Varian

Crossed Field and Receiver Protector Products

1.0 INTRODUCTION

Varian herewith submits this Decommissioning Funding Plan (DFP) to the U.S. Nuclear Regulatory Commission (USNRC) in accordance with the requirements mandated in 10 CFR 30.35(a) Varian possession Materials License Number 20-02237-04 is subject to this regulation in that authorization has been granted by the USNRC to possess and use unsealed byproduct materials of half-life greater than 120 days and in quantities exceeding those specified in 10 CFR 20 (Appendix C).

1.1 DESCRIPTION OF PRODUCTS CONTAINING RADIOACTIVE MATERIALS

Varian manufactures receiver protector tubes at its Beverly, Massachusetts facility which are used in a wide variety radar systems employing a common antenna for both the transmitter and the receiver. Receiver protector tubes, as a component in the antenna system, block high level signals generated by the transmitter from damaging the receiver and allow the low level signals to pass through and enter the receiver. By acting as a switch, the receiver protector tube turns on to block signals when the radar transmits and turns off to detect the response. Radar protectors typically consist of gas discharge devices, solid-state devices, ferrite devices or a combination of these. The byproduct material subject to the license is used in the manufacture of the gas discharge type devices by Radar Products Division.

Several byproduct materials are employed for different manufacturing applications including Tritium (Hydrogen 3), Cobalt 60 and Promethium 147. Devices produced by Varian meet the following criteria:

1. Each unit is sealed, and the byproduct material contained inside is not accessible without breaking the device;

2. Each unit contains less radioactivity than amounts specified in 10 CFR 30.15(8) - "Electron Tubes" containing byproduct material; and

3. Each unit is marked in accordance with NRC and State regulations.

1.2 QUANTITIES OF STORED RADIOACTIVE MATERIAL

As required by the Materials Licence issued to Varian radioactive material is not possessed in excess of the following quantities:

Byproduct Material	Chemical and/or Physical Form	License Limit	Typical Quantities Stored
1) Cobalt 60	Any	50	< 20 mCi
2) Promethium 147	Any	400	< 40 mCi
3) Hydrogen 3	Any	9	< 5 Ci
4) Hydrogen 3	Titanium Tritide Foils	400	< 200 Ci

1.3 RECENT NRC INSPECTION EXPERIENCE

In 1991 the U.S. Nuclear Regulatory Commission conducted a Safety Inspection of Varian's licenses. As detailed on NRC Form 591 the finding of the inspection was that: "Within the scope of this inspection, no violations were observed."

1.4 AREAS WHERE UNSEALED RADIOACTIVITIES ARE USED OR STORED

Varian Crossed Field and Receiver Protectors limits the use of the unsealed sources listed in 1.2 to the Tritium Laboratory located in Building 5 of its 150 Sohier Road, Beverly, Massachusetts facility. Protector tubes containing these sources are transferred to other areas of Building 5. Stock solutions of radioisotopes are stored in a small enclosed area in Building 4.

Prior to 1982 the Tritium laboratory was located in Building #1. This area was decontaminated in 1983 however a potentially contaminated part of the ventillation system remains on the roof above this room.

2.0 PROJECTED DECOMMISSIONING ACTIVITIES

The objective of the projected decommissioning activities detailed below is to remove property and structures at the facility safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license as defined in 10 CFR 30.4(a). The affected areas include the Tritium Lab, the Exhaust Trolley Area, the Tip-off Cap-off Area, the old Tritium Lab Welding Area, the TR Production Dispensing Station, the Source Storage Area and the Manufacturing Areas. Decommissioning tasks specific to each of these locations are as follows:

2.1 TRITIUM LAB

a) Remove hoods, glove boxes, Welding units and air conditioner. Dismantle and dispose of as radioactive waste

b) Remove entire exhaust ventilation system and dispose of as radioactive waste.

c) Survey and decontaminate remaining surfaces including floor walls, ceiling light fixture, benches, cabinets, sinks, freezer and floor drain.

d) Dispose of wall sections, floor linoleum and other items that cannot be decontaminated and disposed of as radioactive waste.

Probable Items Needing Disposal

Item	Volume ft^3	Estimated Activity mCi H-3
Ductwork	15	< 10
Lab Equipment	20	< 10
Linoleum	5	< 5
Walls	100	< 10
Floor Scabbling	15	< 10

Areas Requiring Decontamination

Item	Area ft^3
Walls & Floor	500
Work Benches	50
Sink & Freezer	15

2.2 EXHAUST AREA

a) Survey and remove any contaminated equipment and dispose of as radioactive waste.

b) Survey and decontaminate (< 5 ft^3 expected) if necessary bench and floor areas (< 50 ft^2 expected).

2.3 TEST AREA

a) Survey benches, floor and equipment.

b) Remove contaminated equipment and dispose of as radioactive waste (< 5 ft^3 expected).

c) Decontaminate bench and floor areas if necessary (< 50 ft^2 expected).

2.4 MANUFACTURING AREAS AND PATHWAYS

a) Survey pathways (~2500 ft^2) and decontaminate if necessary (no contamination expected).

b) Survey production area floors, benches and equipment (~6000 ft^2). Decontaminate if necessary (little or no contamination expected).

2.5 BUILDING FOUR BASEMENT STORAGE AREA

a) Perform preliminary survey of all areas and equipment items.

b) Decontaminate walls, floor and ceiling as necessary.

c) Dispose of contaminated storage containers, cinder blocks and wall sections which cannot be decontaminated.

d) Perform final radiation survey. Decontaminate and resurvey if necessary.

e) Dispose of stock solutions of source materials as radioactive waste.

f) Dispose of lead bricks as mixed waste.

Probable Contaminated Items Needing Disposal

Item	Volume ft^3	Est. Activity
Storage Containers	5	10 mCi H-3
Stock Solution (H-3)	-	40 Ci H-3
Stock Solution (Co-60)	-	1.0 mCi Co-60
Lead Bricks (mixed waste)	3	< 10 mCi H-3
Cinder Blocks	5	< 10 mCi H-3
Walls	5	< 10 mCi H-3

Areas to be Monitored and Decontaminated

Item	Monitored Area ft^2	Decontaminated Areas ft^2
Walls, Floor and Ceiling	125	50
Containers & Materials	100	-

2.6 OLD H-3 LAB IN BUILDING #1

a) Monitor all floors, walls and ductwork and any equipment stored in room.

b) Remove and dispose of contaminated ductwork.

c) Monitor roof area for contamination.

Probable Contaminated Items Needing Disposal

Item	Volume ft^2	Estimated Activity mCi H-3
Ductwork and Pump on Roof	10	20
Wall Areas	5	10

Areas Needing to be Monitored and Decontaminated

Item	Monitored Areas ft^2	Decontaminated Areas ft^2
Walls, Floors, Ceiling and Roof Area	1000	100
Equipment Items	200	-

3.0 SITE SPECIFIC COST ESTIMATE FOR DECOMMISSIONING

The methods used for estimating the costs for this Decommissioning Funding Plan are based on the U.S. Nuclear Regulatory Guide 3.66 entitled: "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70, and 72." The cost estimates included in this document were developed by a Certified Health Physicist and the format used to present the cost information is based on the tables shown in the Regulatory Guide.

3.1 ESTIMATED COST FOR DECOMMISSIONING AT THE FACILITY

The estimated cost for performing the projected decommissioning activities as described in Section 2.1 will amount to $276,969. A summary of the individual costs for each major decommissioning task is shown in Table 1:

TABLE 1
SUMMARY OF DECOMMISSIONING COST ESTIMATES

Decommissioning Activity	Estimated Cost
Planning and Preparation	$ 9, 275
Monitoring, Decontaminating and Dismantling	$ 59,350
Bioassays and Dosimetry	$ 3,000
Supplies and Equipment	$ 11,500
Radioactive Wastes	$ 120,000
Final Radiation Survey	$ 8,450
HP Auditing and Oversight	$ 10,000
Total	$ 221,575
Contingencies - 25%	$ 55,394
Grand Total	$ 276,969

3.2 COST ESTIMATING TABLES

The summary of estimated decommissioning costs is based upon the calculations presented in the following cost estimating tables. The format of these tables is essentially similar to those illustrated in Appendix F of the USNRC Guide 3.66.

3.2.1 PLANNING AND PREPARATION

TABLE 2
PLANNING AND PREPARATION WORK DAY ESTIMATE

Task	Supervisor	Other (HP Technician)	HP	Clerical	Total Days	Total Cost
1) Preparation of Documentation for Regulatory Agencies	N/A	N/A	5.0		5.0	$2,000
2) Submittal of Decommissioning Plan to NRC when required by 10CFR 30.36 (c) (2)	1.0	N/A	0.75	4	5.75	$1,200
3) Development of Work Plans	1.0	N/A	5.0	1	7.0	$2,525
4) Procuring of Special Equipment	0.5	N/A	0.5	N/A	1.0	$400
5) Staff Training	1.0	N/A	2.0	N/A	3.0	$1,200
6) Characterization of Radiological Condition of the Facility	N/A	3.0	3.0	N/A	6.0	$1,950
7) TOTAL:	3.5	3.0	16.25	5.0	27.75	$9,275

TABLE 3
UNIT COSTS FOR DECOMMISSIONING WORKERS

Position	Basic Salaries ($/Year)	Overhead Rate	Worker Cost per Day
Supervisor	$60,000	28.75%	$400
Foreman	$40,000	28.75%	$250
Craftsman	$40,000	28.75%	$250
Technician	$40,000	28.75%	$250
Health Physicist	$60,000	28.75%	$400
Laborer	$25,000	28.75%	$150
Clerical	$20,000	28.75%	$125

3.2.2 DECONTAMINATION AND/OR DISMANTLING OF RADIOACTIVE FACILITY COMPONENTS

TABLE 1
PROPERTY AND STRUCTURES TO BE DISPOSED OF OR DECONTAMINATED DURING DECOMMISSIONING

	Number		Dimensions	
	Decontamination for Release	Disposal at Low Level Waste Site	Decontamination for Release (ft^2)	Disposal at Low Level Waste Site (ft^3)
Glove Box	N/A	1	N/A	5
Fume Hood	N/A	3	N/A	15
Hot Cells	N/A	N/A	N/A	N/A
Lab Benches	N/A	N/A	50	N/A
Sink and Drain	N/A	1	N/A	5
Amount of Floor Space	N/A	N/A	500	22
Amount of Wall and Ceiling Space	N/A	110	500	110
Ventilation Ductwork	N/A	4	N/A	25
Air Conditioner	N/A	1	N/A	5
Lead Bricks	N/A	50*	N/A	3
Cinder Blocks	N/A	20	N/A	5
Storage Containers	N/A	3	N/A	5
TOTAL:		193	1,050	200

* Mixed Waste

TABLE 5
DECONTAMINATION AND DISMANTLING WORKDAY ESTIMATE

Task	Supervisor	Technician	HP	Craftsman	Laborer	Total	Total Cost
1) Decon/ Dismantle Major Components and/or Processing and Storage tanks	N/A	N/A	-	N/A	N/A	N/A	N/A
2) Decon/ Dismantle Labs, Fume Hoods, Glove Boxes and Benches	5	40	40	5	40	130	$35,250
3) Decon/ Storage Area and Old H-3 Lab	2	10	5	2	10	29	$8,300
4) Decon/ Dismantle Waste Treatment Area	(NOTE: Not Applicable at this facility)						
5) Monitor for Compliance Re-clean and re-monitor	2	20	10	N/A	20	N/A	$12,800
6) Bio-assay and Dosimetry							$3,000

TABLE 6
EQUIPMENT AND SUPPLIES COST ESTIMATE

Equipment and Supplies	Cost
Decontamination Supplies and Equipment	$5,000
Survey Meter Rental/Purchase	$5,000
Protective Clothing and Respiratory Protection	$1,000
Miscellaneous	$500
TOTAL:	$11,500

3.2.3 PACKAGING SHIPPING AND DISPOSAL OF RADIOACTIVE WASTES

TABLE 7
COST ESTIMATE FOR CONTAINERS

Waste Type	Volume (ft^3)	Number of Containers	Type of Containers	Unit Cost of Container	Cost of Containers
A	225	30	55 gallon	\$50	\$1,500
TOTAL:	225	30		\$50	\$1,500

TABLE 8
ESTIMATE SHIPPING AND DISPOSAL COSTS FOR RADIOACTIVE WASTES

Burial and Shipping Charges:	\$400 per ft^3
Surcharges: per Container: for Disposal:	 \$150 \$120 per ft^3

Waste Type	Burial Volume	Unit Cost of Burial	Surcharge	Burial Cost
A	235 ft^3	\$400	\$120	\$117,000
Mixed	3 ft^3	\$1,000	-	\$3,000
TOTAL:	228 ft^3			\$120,000

3.2.4 FINAL RADIATION SURVEY

TABLE 9
FINAL RADIATION SURVEY

Task	Supervisor	Technician	HP	Clerical	Total Hours	Total Cost
Survey	2	10	5	-	17	$530
Documentation	2	-	5	2	9	$315
TOTAL:	4	10	10	2	26	$845

Note: The restoration of contaminated ground, site stabilization, and long-term surveillance are not applicable at this facilty.

PAYMENT SURETY BOND

Date bond executed: AUGUST 10, 1993

Effective date: AUGUST 10, 1993

Principal: VARIAN ASSOCIATES, INC.
150 SOHIER ROAD, BEVERLY, MA 01915-5595

Type of Organization: CORPORATION

State of Incorporation: DELAWARE

NRC License number, name and address of facility, and amount(s) for decommissioning activity guaranteed by this bond: #20-02237-04.

Surety(ies) SAFECO INSURANCE COMPANY OF AMERICA
120 MONTGOMERY STREET, #2050, SAN FRANCISCO, CA 94104

Type of Organization: CORPORATION

State of Incorporation: WASHINGTON

Surety's qualification in jurisdiction where licensed facility is located.

Surety's bond number: 5770122

Total penal sum of bond: $277,000.00

Know all persons by these presents, that we, the Principal and Surety(ies) hereto, are firmly bound to the U.S. Nuclear Regulatory Commission (hereinafter called NRC) in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety; but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

WHEREAS, the NRC, and agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part [30, 40, 70, or 72], applicable to the Principal, which require that a license holder or an applicant for a facility license provide financial assurance that funds will be available when needed for facility decommissioning.

NOW, THEREFORE, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of decommissioning of each facility identified above, fund the standby trust fund in the amount identified above for the facility;

Or, if the Principal shall fund the standby trust fund in such amount after an order to begin facility decommissioning is issued by the NRC or a U.S. district court or other court of competent jurisdiction;

Or, if the Principal shall provide alternative financial assurance and obtain the written approval of the NRC of such assurance, within 30 days after the date a notice of cancellation from the Surety(ies) is received by both the Principal and the NRC, then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the NRC that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the NRC provided, however, that cancellation shall not occur during the 90 days beginning on the date of receipt of the notice of cancellation by both the Principal and the NRC, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the NRC and to Surety(ies) 90 days prior to the proposed date of termination, provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond from the NRC.

The Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the NRC.

If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

In Witness Whereof, the Principal and Surety(ies) have executed this financial guarantee bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies).

PRINCIPAL: VARIAN ASSOCIATES, INC.

[Signature(s)] R E Bly

[Names(s)] R. E. Bly

[Title(s)] Assistant Secretary

[Corporate seal]

CORPORATE SURETY(IES) SAFECO INSURANCE COMPANY OF AMERICA
120 MONTGOMERY STREET, #2050
[Name and address] SAN FRANCISCO, CA 94104

State of Incorporation: WASHINGTON

Liability limit: $ 277,000.00

[Signature(s)] Katsuko Takata

[Name(s) and title(s)] KATSUKO TAKATA, ATTORNEY-IN-FACT

[Corporate seal]

Bond premium: $ 1,385.00

SAFECO®

POWER OF ATTORNEY

SAFECO INSURANCE COMPANY OF AMERICA
GENERAL INSURANCE COMPANY OF AMERICA
HOME OFFICE: SAFECO PLAZA
SEATTLE, WASHINGTON 98185

No. 8057

KNOW ALL BY THESE PRESENTS:

That **SAFECO INSURANCE COMPANY OF AMERICA** and **GENERAL INSURANCE COMPANY OF AMERICA**, each a Washington corporation, does each hereby appoint
**********KATSUKO TAKATA; San Francisco, California***

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and **GENERAL INSURANCE COMPANY OF AMERICA** have each executed and attested these presents

this 4th day of January, 19 93.

CERTIFICATE

Extract from the By-Laws of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA:**

"Article V, Section 13. - FIDELITY AND SURETY BONDS . . . the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business . . . On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA** adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,
(i) The provisions of Article V, Section 13 of the By-Laws, and
(ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
(iii) Certifying that said power-of-attorney appointment is in full force and effect,
the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, R. A. Pierson, Secretary of **SAFECO INSURANCE COMPANY OF AMERICA** and of **GENERAL INSURANCE COMPANY OF AMERICA**, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 10TH day of AUGUST, 19 93.

R A Pierson

S-974/EP 1/93

CONVERSATION RECORD

TIME 2:25pm. DATE 7/16/93.

TYPE ☐ VISIT ☐ CONFERENCE ☑ TELEPHONE ☑ INCOMING ☐ OUTGOING

Location of Visit/Conference:

ROUTING	
NAME/SYMBOL	INT

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO:
Aliska Finney, Risk Manager	VARIAN ASSOCIATES.	415-424-6803

SUBJECT FINANCIAL ASSURANCE for Decommissioning

SUMMARY Alan Palter, Esq.

Paul Norton, Health + Safety Dept.

They asked @ the criteria set for the "self" Guarantee, as described on page 2 of the letter dated June 11, 1993.

Mr. Palter asked @ the tangible net worth of $1 billion dollars. I told him that all of this is still currently under way. They told me that they do not have a parent-subsidiary relationship with their sites - ~~other~~ rather they have "divisions". Most/All of their subsidiaries are overseas/international.

They asked me @ FA/DFP. I told them that they need to submit both at this point because their renewal application is being reviewed. They will be submitting a FA mechanism, possibly a surety bond. After that they will be submitting a Decommissioning Funding Plan.

ACTION REQUIRED

Financial Assurance package.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
DIMITRIADIS.	[signature]	7/16/93.

ACTION TAKEN

SIGNATURE	TITLE	DATE

50271-101 CONVERSATION RECORD OPTIONAL FORM 271 (12-76) DEPARTMENT OF DEFENSE

U.S. G.P.O. 1983-381-526/8346

OFFICIAL RECORD COPY ML 10

113624

JUN 11 1993

Docket No. 030-10763
License No. 20-02237-04
Control No. 113624

Varian Associates, Inc.
ATTN: Arlyne Titus
Insurance Analyst
611 Hansen Way
P.O. Box 10800
Palo Alto, California 94303-0883

Dear Ms. Titus:

This is in reference to your submittal dated March 7, 1991 with enclosures, to provide financial assurance for License No. 20-02237-04. We have reviewed your submittal and request you to modify your submission to address the specific matters described below:

1. Submit a Certification Statement (Regulatory Guide 3.66, Page 1-5)

A statement of certification of financial assurance, as recommended by Regulatory Guide 3.66 "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70 and 72" (June 1990), Page 1-5 was not included in the submittal. The statement of certification provides information that allows the NRC to verify the names and locations of the facilities for which financial assurance is provided and the amount and types of materials handled and officially certifies that you are in compliance with the appropriate requirements. Please submit the certification.

2. Submit an Alternative Financial Assurance Mechanism (10 CFR 30.35(f))

The submittal included a financial test applicable to a parent guarantee. Such a guarantee must be provided by the licensee's parent company, rather than the licensee. The submission must demonstrate that the licensee and parent guarantor are separate and distinct entities. There is no evidence in the submission of a parent-subsidiary relationship between the licensee and the guarantor. In fact, in Paragraph 2 of the letter from your Chief Financial Officer you state that the licensed facility is owned or operated by Varian Associates. Since you did not identify a corporate parent to provide an independent financial commitment beyond your own, submit another type of financial assurance mechanism in compliance with 10 CFR 30.35.

3. <u>Required Documentation in Support of a Self-Guarantee and Schedular Exemption Request for the Period of Rulemaking</u>

If you decide to resubmit documents in support of a self-guarantee, include a request for a schedular exemption from the regulations that specify acceptable financial assurance mechanisms, until completion of the self-assurance mechanism rulemaking, which is currently underway. We cannot assure that such an exemption will be granted. In order for you to qualify for this option you would be required to submit all of the following documentation:

A. A company must demonstrate that it passes the financial test which includes:

1. Tangible net worth of at least 1 billion dollars.

2. Tangible net worth at least 10 times the total decommissioning cost estimate for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor.

3. Assets located in the United States amounting to at least 90 percent of total assets or at least 10 times the total current decommissioning cost estimate for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor.

4. A current rating for its most recently issued bonds of AAA, AA, or A as issued by Standard and Poors (S&P) or Aaa, Aa, or A as issued by Moodys.

B. Additional requirements:

1. The company must have at least one class of equity securities registered under the Securities Exchange Act of 1934.

2. The company must provide the Commission with copies of all reports filed with the Securities and Exchange Commission under Section 13 of the Securities Exchange Act of 1934.

3. The company's independent certified public accountant must compare the data used by the company in the financial test with the company's independently audited year end financial statements.

4. The company must repeat passage of the financial test within 90 days after the close of each succeeding fiscal year.

5. The company must agree to notify NRC within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test.

Satisfactory financial assurance is required for your license. Therefore, we request that you respond within 30 calendar days of the date of this letter. If you have any questions, please contact Anthony Dimitriadis at (215) 337-6953.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Research, Development and
Decommissioning Section
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide 3.66

cc:
Varian/Beverly Microwave Division
ATTN: John McKinley
Radiation Safety Officer
8 Salem Road
Beverly, Massachusetts 01915

DRSS:RI	DRSS:RI
Dimitriadis\Tony;srb	Kinneman
6/10/93	6/10/93

M520
L3

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

AUG 28 1992

20-02237-04

MEMORANDUM FOR: John J. Kinneman, Chief
Research, Development and Decommissioning Section
Division of Radiation Safety and Safeguards, Region I

FROM: Louis M. Bykoski
Decommissioning and Regulatory Issues Branch
Division of Low-Level Waste Management and Decommissioning
Office of Nuclear Material Safety and Safeguards

SUBJECT: THE OFFICE OF GENERAL COUNSEL AND CONTRACTOR COMMENTS ON NONSTANDARD FINANCIAL ASSURANCE SUBMITTAL

Our contractor, ICF Incorporated, and OGC have reviewed and provided comments on four Region I nonstandard financial assurance submittals sent to us for review. Included in this mailing are:

1. Exxon Research and Engineering Company (parent guarantee);
2. Varian Associates, Inc. (certification);
3. Woods Hole Oceanographic Institute (DFP - escrow account); and
4. Schlumberger Well Services/EAR Photoelectric (DFP - surety bond).

The ICF comments are presented in two parts. The first part deals with specific recommendations to current deficiencies. The second part (Other Issues) provides a discussion of changes to the standard wording that are acceptable and are not considered to be deficiencies. The OGC comments include additional deficiencies that need to be corrected by the licensee and comments for our internal use.

You should carefully review the comments before preparing the deficiency letter. We have enclosed more specific information to help you sort and consolidate the ICF and OGC comments.

113624

SEP 08 1992

Should you have any further questions with regard to the comments, please call me on FTS 964-2572 or David Futoma of OGC on FTS 964-1621.

Louis M. Bykoski

Louis M. Bykoski
Decommissioning and Regulatory
Issues Branch
Division of Low-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: As stated

AUG 28 1992

LIST OF INSTRUCTIONS

VARIAN ASSOCIATES, INC.

In reviewing the comments the reviewer will note that there will be some overlap between ICF and OGC comments. The following comments should be included in the basis for the deficiency letter:

1. ICF comments 1 through 2.

2. All OGC comments.

All other comments and discussions are for reviewer information.

MEMO TO: Louis M. Bykoski, NMSS

FROM: OGC

RE: REVIEW OF NONSTANDARD SUBMITTALS

AUG 2 8 1982

Varian Associates, Inc.: No legal objection to ICF recommendations (1) and (2).

9300 Lee Highway
Fairfax, Virginia
22031-1207

703/934-3000

ICF INCORPORATED

July 21, 1992

To: Dr. Lou Bykoski, NMSS/NRC

From: John Collier and Craig Dean, ICF Incorporated

Subject: Review of Financial Test Submitted by Varian Associates, Inc., Beverly Microwave Division

---

Varian Associates, Inc. in Palo Alto, California submitted a certification of financial assurance, using a financial test, in the amount of \$750,000.[1] The submission assures decommissioning costs for license 20-02237-04 issued under 10 CFR Part 30. Upon review of the submission, ICF recommends that NRC Region I require the licensee to modify the submission in the following ways:

(1) Submit a certification statement (*Regulatory Guide 3.66*, page 1-5); and

(2) Submit an alternative financial assurance mechanism (10 CFR 30.35(f)).

These recommendations are discussed below.

(1) Submit a Certification Statement (*Regulatory Guide 3.66*, page 1-5)

The licensee did not submit a statement of certification of financial assurance, as recommended by *Regulatory Guide 3.66* "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70, and 72" (June 1990), page 1-5. Judging from the amount of financial assurance provided by the submitted mechanism, it appears that the licensee should have submitted a certification statement. The statement of certification, in addition to providing information that would allow NRC to verify the certification amount (e.g., the names and locations of the facilities for which financial assurance is provided, and the amount and types of materials handled), officially certifies that the licensee is in compliance with the appropriate requirements. ICF recommends that NRC require the licensee to submit a statement of certification.

---

[1] We assume that NRC Region I has verified that the certification amount is acceptable under 10 CFR 30.35.

(2) **Submit an Alternative Financial Assurance Mechanism (10 CFR 30.35(f))**

The licensee, Varian Associates, Beverly Microwave Division, submitted a financial test to assure decommissioning costs.[2] A financial test is not an acceptable financial assurance mechanism under 10 CFR 30.35(f). Although the financial test may be used as part of a parent company guarantee, the guarantee must be provided by the licensee's parent company, rather than the licensee. NRC does not allow a self-guarantee because it would not "guarantee that decommissioning costs will be paid should the licensee default" (10 CFR 30.35(f)(2)), nor would it provide "an independent commitment beyond that of the licensee to expend funds" (53 Federal Register 24036, June 27, 1988).

There is no evidence in the submission of a parent-subsidiary relationship between the licensee and the guarantor. In fact, the submission states, in Paragraph 2 of the letter from the Chief Financial Officer, that the licensed facility is owned or operated by Varian Associates. Because the licensee did not identify a corporate parent to provide an independent financial assurance commitment beyond that of the licensee itself, ICF recommends that NRC require the licensee to submit another type of financial assurance mechanism in compliance with 10 CFR 30.35. Regardless of the financial assurance mechanism the licensee ultimately uses, ICF recommends that the licensee follow closely the recommended wording and other conditions contained in the *Regulatory Guide 3.66*.

attachments

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[2] The submission includes a letter from the licensee's Chief Financial Officer (CFO) indicating compliance with the financial test criteria, and a special report from the licensee's independent certified public accountant confirming the data in the CFO's letter. The submission does not include a letter from the licensee's Chief Executive Officer, a parent company guarantee, the guarantor's annual financial statements, or a standby trust agreement.

License # 20-02237-0

APPENDIX A
CHECKLIST FOR DECOMMISSIONING FINANCIAL ASSURANCE

NAME OF LICENSEE OR APPLICANT Varian Associates Inc.

MAILING ADDRESS 3100 Hansen Way

Palo Alto CA 94303

A. Licensee Part (check one of the following):

X Part 30 Licensee or Applicant ___ Part 70 Licensee or Applicant

___ Part 40 Licensee or Applicant ___ Part 72 Licensee or Applicant

B. Check appropriate item in each category (if applicable)

1. 3/11/91 Date of Financial Assurance Submission

2. ___ Public Entity

   X Private Entity

3. X Certification of Financial Assurance $750,000 No Certification Statement

   ___ Decommissioning Funding Plan

4. (a) ___ Prepayment Option (See Appendix B)
   - ___ Trust Fund
   - ___ Escrow Account
   - ___ Certificate of Deposit
   - ___ Government Fund
   - ___ Deposit of Government Securities

   (b) X Surety/Insurance/Other Guarantee (See Appendix C)
   - ___ Surety bond
   - ___ Letter of Credit
   - ___ Line of Credit
   - X Parent Company Guarantee/Financial Test*

   (c) ___ External Sinking Fund, Sinking Account and Surety/Insurance (See Appendix D)
   - ___ Trust Fund
   - ___ Escrow Account
   - ___ Certificate of Deposit
   - ___ Government Fund
   - ___ Deposit of Government Securities
   - ___ Surety Bond
   - ___ Letter of Credit
   - ___ Line of Credit

   (d) ___ Statement of Intent (public entities only)

*May not be used in combination with any other instrument.

VARIAN ASSOCIATES, INC.
LICENSE # 20-02237-04

APPENDIX C

CHECKLIST FOR SUBMISSION OF SURETY/INSURANCE/PARENT COMPANY GUARANTEE

A. Check Appropriate Form of Surety/Insurance/Guarantee

___ Surety Bond

___ Letter of Credit

___ Line of Credit

X Parent Company Guarantee/Financial Test*

___ Insurance

B. Check Documents Submitted for Surety/Insurance/Guarantee

1. Surety Bond
   - ___ Surety Bond
   - ___ Standby Trust Agreement
   - ___ Acknowledgement
2. Letter of Credit
   - ___ Letter of Credit
   - ___ Standby Trust Agreement
   - ___ Acknowledgement
3. Line of Credit
   - ___ Verification
   - ___ Standby Trust Agreement
   - ___ Acknowledgement
4. Parent Company Guarantee
   - No Letter from Chief Executive Officer of Applicant or Licensee
   - x Letter from Chief Financial Officer of Parent Company
   - x Financial Test: Alternative [I or II]
   - x Auditor's Special Report and Attached Schedule
   - No Corporate Guarantee
   - No Standby Trust Agreement
   - No Acknowledgement
5. Insurance
   - ___ Certificate of Insurance
   - ___ Standby Trust Agreement
   - ___ Acknowledgement

1) CEO letter
- None Submitted

2) CFO's letter
- financial test submitted in support of a facility owned by Applicant and not a subsidiary of Applicant (Self-test)

3) Financial test
- correct

4) Auditor's Report
- does not conform to recommended wording
- no attached schedule

5) Corporate Guarantee
none

* May not be used in combination with any other instrument.

6) Standy Trust / Acknowledgement
- none

113624

APR 7 1992

Docket No. 030-10763
License No. 20-02237-04
Control No. 113624

MEMORANDUM FOR: Louis M. Bykoski, NRC Project Officer
Low Level Waste Management, Low Level Regulatory Branch

FROM: John D. Kinneman, Chief
Research, Development & Decommissioning Section
Division of Radiation Safety and Safeguards

SUBJECT: FINANCIAL ASSURANCE SUBMITTAL -
VARIAN/BEVERLY MICROWAVE DIVISION

John Austin's August 6, 1990 memorandum set forth a procedure for submitting nonstandard financial assurance submittals, parent company guarantees and decommissioning funding plans to you for review by the NRC contractor.

The enclosed submission includes a parent company guarantee for your review.

Please refer to License No. 20-02237-04 and Control No. 113624 in your response to this request.

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Research, Development &
Decommissioning Section
Division of Radiation Safety
and Safeguards

Enclosure: Letter from licensee dated March 7, 1991, with enclosures

cc w/o encl:
J. Glenn, NMSS

bcc:
J. Kinneman, RI

RI:DRSS
Kinneman/gc/gcb

04/6/92

OFFICIAL RECORD COPY FIN ASS VARIAN - 0001.0.0
04/03/92

ML 10

030-10763

varian

March 7, 1991

Mailed Certified,
Return Receipt Requested

Mr. Eric Reber
U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Re: Varian/Beverly Microwave Division
License No. 20-02237-04
<u>Financial Assurance for Decommissioning</u>

Dear Mr. Reber:

Enclosed please find our "Letter from the Chief Financial Officer" demonstrating financial assurance for decommissioning through use of Financial Test, Alternative I. Also enclosed is a separate letter from Coopers & Lybrand, Varian's independent accountants, confirming the figures used in the test.

Additionally, enclosed you will find copies of Varian's Annual and 10-K Reports for the fiscal year ended September 28, 1990.

If you should have any questions or require additional information, please do not hesitate to contact me:

Varian Associates, Inc.
3100 Hansen Way #E-220
Palo Alto, CA 94303

Sincerely,

Arlyne Titus

Arlyne Titus
Insurance Analyst

MAR 11 1991

(415) 424-5357

Enc.

cc: J. McKinley

"SECTION COPY"

113624

varian

February 25, 1991

U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Re: Varian/Beverly Microwave Division
License No. 20-02237-04

I am the Chief Financial Officer of Varian Associates, Inc., 3100 Hansen Way, Palo Alto, California, a corporation. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in 10 CFR Part 30.

This firm guarantees, through the parent company guarantee submitted to demonstrate compliance under 10 CFR Part 30, the decommissioning of the following facility owned or operated by this firm. The current cost estimates or certified amounts for decommissioning, so guaranteed, are shown for each facility:

Name of Facility	Location of Facility	Certified Amount or Current Cost Estimates
Varian/Beverly Microwave Div.	8 Salem Road Beverly, MA 01915	$750,000 (Certified Amount)

This firm is required to file a Form 10K with the U.S. Securities and Exchange Commission for the latest fiscal year.

This fiscal year of this firm ended on September 28. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements and footnotes for the latest completed fiscal year, ended September 28, 1990.

FINANCIAL TEST: ALTERNATIVE I

1.	Decommissioning cost estimates or certified amounts for facility License No. 20-02237-04	$	750,000
*2.	Total liablities	$	523,363,000
*3.	Tangible Net Worth **	$	378,030,336
*4.	Net Worth	$	400,211,000
*5.	Current assets	$	667,797,000
*6.	Current liabilities	$	407,846,000
*7.	Net working capital (line 5 minus line 6)	$	259,951,000
*8.	The sum of net income plus depreciation, depletion, and amortization	$	41,535,000
*9.	Total assets in United States	$	484,000,000
10.	Is line 3 at least $10 million?		YES
11.	Is line 3 at least 6 times line 1?		YES
12.	Is line 7 at least 6 times line 1?		YES
13.	Are at least 90 percent of firm's assets located in the United States? If not, complete line 14		NO
14.	Is line 9 at least 6 times line 1?		YES
15.	Is line 2 divided by line 4 less than 2.0?		YES
16.	Is line 8 divided by line 2 greater than 0.1?		NO
17.	Is line 5 divided by line 6 greater than 1.5?		YES

* Denotes figures derived from financial statements
** Tangible net worth is defined as net worth minus goodwill, patents, trademarks, and copyrights

I hereby certify that the content of this letter is true and correct to the best of my knowledge.

Robert A. Lemos
Vice President, Finance

February 25, 1991

RAL:AKT

Coopers
&Lybrand

certified public accountants

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors
of Varian Associates, Inc.

We have audited the consolidated balance sheet of Varian Associates, Inc. and subsidiary companies as of September 28, 1990, and the related consolidated statements of earnings, shareholders' equity, and cash flows for the year then ended and have issued our report thereon dated October 19, 1990. 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 audit.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

We have compared the data which the letter to the U.S. Nuclear Regulatory Commission, Region One Office, dated February 25, 1991, from the Chief Financial Officer of Varian Associates, Inc. specifies as having been derived from the independently audited financial statements for the year ended September 28, 1990, to the financial statements and supporting schedules we audited and found it to be in agreement.

San Jose, California
February 25, 1991

Coopers & Lybrand

varian

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended September 28, 1990   Commission File No. 1-7598

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

For the fiscal year ended September 28, 1990

[ ] 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 ____________

VARIAN ASSOCIATES, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	94-2359345
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

3100 Hansen Way, Palo Alto, California 94304-1030
(Address of principal executive offices)

(415) 493-4000
(Registrant's telephone number)

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

Title of each class	Name of each exchange on which registered
COMMON STOCK, $1.00 PAR VALUE	NEW YORK STOCK EXCHANGE PACIFIC STOCK EXCHANGE

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

None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
YES X NO ____

	As of October 26, 1990
Aggregate market value of the voting stock held by non-affiliates of the registrant:	$518,340,000
Number of shares of common stock, par value $1, outstanding:	18,763,000

An index of exhibits filed with this Form 10-K is located on page 47.

Documents Incorporated by Reference:
Varian Associates, Inc. notice of annual meeting of shareholders and proxy statement   Part III

VARIAN ASSOCIATES, INC.

1990 FORM 10-K ANNUAL REPORT
Table of Contents

PART I

PART II

PART III

PART IV

Item 1. (continued)

Replacements and spares represent over one-half of the tube sales, particularly those used for communications, defense, and medical applications. Backlog for this segment amounted to $283 million and $301 million in fiscal 1990 and 1989, respectively.

The Company's Semiconductor Equipment business manufactures processing systems which are essential to making integrated circuits. A world leader in the development, manufacture, and application of ion implantation and sputter-coating systems, Varian equipments are operating 24 hours a day in every wafer fabrication facility in the world, and its latest models are being used to develop tomorrow's state-of-the-art devices. Backlog for this business amounted to $125 million in both fiscal 1990 and 1989.

The Instruments business manufactures, sells and services a variety of scientific instruments for analyzing chemical substances including metals, inorganic materials, organic compounds, polymers, natural substances, and biochemicals. The products include liquid and gas chromatographs, NMR spectrometers, ultraviolet visible and atomic absorption spectrometers, and small, disposable tools used to prepare chemical samples for analysis. Typical applications are biochemical and organic chemical research, measurement of the chemical composition of mixtures, studies of the chemical structure of pure compounds, quality control of manufactured materials, chemical analysis of natural products, and environmental monitoring and measurement. The major markets served are the pharmaceutical and chemical industries, chemical and life science academic research, government laboratories and specific areas of the health care industry. Large growing areas for the use of the Company's analytical instruments are environmental monitoring and life science applications in industry, government, and academic institutions. Backlog for this business amounted to $60 million and $56 million in fiscal 1990 and 1989, respectively.

The Medical Equipment business manufactures and markets linear accelerators, cancer treatment planning systems, and data management systems for radiotherapy centers. Linear accelerators are used in cancer therapy and for industrial radiographic applications. The Company's leading CLINAC® series of medical linear accelerators, marketed to hospitals and clinics worldwide, generates therapeutic x-rays and electron beams for cancer treatment. LINATRON® linear accelerators are used in industrial applications to X-ray heavy metallic structures for quality control. Backlog for the Medical Equipment business amounted to $226 million and $218 million in fiscal 1990 and 1989, respectively.

Included in Eliminations and Other are certain insignificant support operations and the Vacuum Products operation.

Item 2. Properties

The Company's executive offices and principal research and manufacturing facilities are located in Palo Alto, California, on 71 acres of land held under leaseholds which expire in the years 2012 through 2058. These buildings owned by the Company are situated on the Palo Alto site, and provide floor space totaling 1,160,000 square feet. The following is a summary of the Company's propeities at September 28, 1990:

	Land (Acres)		Buildings (000's Sq. Ft.)	
	Owned	Leased	Owned	Leased
United States	147	132	2,491	879
International	43	6	397	384
	190	138	2,888	1,263

Utilization of facilities by segment is shown in the following table:

	Buildings (000's Sq. Ft.)				
	Manufacturing, Administrative and Research & Development				
	U.S.	Non-U.S.	Total	Mktg. & Svc.	Total
Electron Devices	1,302	116	1,418	67	1,485
Instruments	285	118	403	269	672
Semiconductor Equipment	517	23	540	105	645
Medical Equipment	192	47	239	128	367
Other Operations	250	86	336	22	358
Total Operations	2,546	390	2,936	591	3,527
Other					624
Total					4,151

Other Operations includes manufacturing support and the Vacuum Products operations.

The capacity of these facilities is sufficient to meet current demand. The Company owns substantially all of the machinery and equipment in use in its plants. It is the Company's policy to maintain its plants and equipment in excellent repair and at a high level of efficiency.

Item 6. Selected Financial Data

(Dollars in millions except per share amounts)	1990	1989	1988	1987	1986
		FISCAL YEARS			
SUMMARY OF OPERATIONS					
Sales	$ 1,264.8	1,219.6	1,045.1	872.8	798.3
Operating Earnings (Loss)	$ 32.2	69.2	45.2	23.7	(38.0)
Interest Expense, Net	$ (11.5)	(9.6)	(6.3)	(4.5)	(6.3)
Other Income (Expense)	$ -	(6.1)	15.0	8.0	-
Earnings (Loss) from Continuing Operations before Taxes (Benefits)	$ 20.7	53.5	53.9	27.2	(44.3)
Taxes (Benefits) on Earnings (Loss)	$ 8.1	20.3	19.4	9.0	(27.9)
Earnings (Loss) from Continuing Operations	$ 12.6	33.2	34.5	18.2	(16.4)
Earnings (Loss) from Discontinued Operations, Net of Taxes (Benefits)	$ (16.7)	(1.7)	(6.7)	3.2	1.5
Net Earnings (Loss)	$ (4.1)	31.5	27.8	21.4	(14.9)
Net Earnings (Loss) Per Share - Fully Diluted					
Earnings (Loss) Continuing Operations	$ 0.64	1.61	1.57	0.84	(0.77)
Earnings (Loss) Discontinued Operations	$ (0.85)	(0.08)	(0.30)	0.14	0.07
Net Earnings (Loss) Per Share	$ (0.21)	1.53	1.27	0.98	(0.70)
Dividends Declared Per Share	$ 0.26	0.26	0.26	0.26	0.26
FINANCIAL POSITION AT YEAR END					
Working capital, excluding notes payable	$ 270.0	282.7	267.6	258.7	231.2
Property, plant, and equipment (at cost)	$ 460.4	511.2	472.6	458.6	429.0
Total assets	$ 923.6	931.3	855.8	829.6	790.2
Long-term debt	$ 76.8	54.9	35.2	38.1	50.8
Total debt	$ 86.9	108.6	49.4	86.9	81.1
Shareholders' equity	$ 400.2	427.3	451.0	438.1	410.9
Shareholders' equity per share outstanding	$ 20.75	21.48	20.81	19.95	19.16
OTHER DATA					
Shares outstanding at year end (in thousands)	19,2[illegible]	19,896	21,674	21,966	21,448
Employees	10,200	10,700	10,200	10,400	10,400
Shareholders	9,500	9,500	10,100	10,000	11,000
Order Backlog	$ 736.5	727.3	675.6	602.8	522.6
Depreciation expense	$ 37.9	34.0	33.7	31.6	28.0
Return from continuing operations, net of taxes (benefits), on average equity	% 3.0	7.6	8.0	4.3	(3.9)
Total debt as a percent of total capital	% 17.8	20.3	9.9	16.6	16.5

Note: Certain amounts in prior years have been restated to reflect discontinued operations. Refer to notes to the consolidated financial statements for information regarding restructuring charges.

This selected financial data should be read in conjunction with the related consolidated financial statements and notes thereto included in Item 8.

Activities to be sold and treated as discontinued operations include broadcasting equipment operations in England and Texas and gallium arsenide-based units in California which make third-generation night vision goggles and complex solid-state circuits. As of year end, Continental Electronics of Texas was sold for approximately $12 million in cash and notes for $2.9 million. A number of minor product lines are also being sold or otherwise disposed of. The operations being exited represent annual sales of about $200 million and employ about 1,600 persons. Varian expects to substantially complete the divestiture of its non-core activities within one year, and believes the reserves taken for those actions are adequate.

Operating profit for the Company's Electron Devices business rose sharply, despite flat sales in its commercial markets and a continuing gradual decline in defense sectors. Improved manufacturing, diligent cost control efforts, and other operational efficiencies contributed to the improved profits. Margins reached double-digit levels by year's end. The business intends to maintain that level of profitability in 1991, even with the likelihood that there will be further shrinkage in some of its markets.

An exceptionally strong fourth-quarter performance led to good orders and sales gains for the Instruments business. Operating profit for the year, before restructuring, rose by nearly 30%, as efforts to improve manufacturing efficiency and quality continued to pay dividends. Sales and profit gains were achieved in most product areas for this business, which has become a prototype in the Company's drive to achieve world-class operational performance.

Semiconductor Equipment orders and sales were below the prior year's levels, reflecting softer demand in the marketplace overall. This business has overcome the problems which frustrated the rollout of its new generation products in the last two years, and has now shipped a substantial number of these new systems. Recent order levels have been reasonably good, and reflect continuing demand for the Company's more established higher margin systems. Although more needs to be done to improve margins on its newer products, this business operated at a profitable level for the year before restructuring charges.

Varian's Medical Equipment business experienced double-digit percent orders and sales increases over 1989. The business benefitted from a combination of international market growth and good customer acceptance of technological advancements for its cancer therapy systems. Order backlog for these systems remains extremely strong, and the business continues to enjoy good profitability.

With the current uncertainties in the world economic environment, Varian is gearing its operations to react quickly to any signs of a significant downturn in its major markets. Phase 1 of the financial reorganization, involving consolidation and cost reduction, has gone well. Phase 2 is focused on attaining Operational Excellence in all of the core businesses. These actions hold the potential for appreciable improvement in the Company's financial performance. The prospects for realizing at least some portion of that added earnings potential in 1991 seem reasonably good, unless the world economy slides into a severe recession.

Item 8. Financial Statements and Supplementary Data

The response to this item is submitted as a separate section to this report. See Item 14.

Item 9. Disagreements on Accounting and Financial Disclosure

None

PART III

Item 10. Directors, Executive Officers, Promoters, and Control Persons of the Registrant

The information concerning the Company's directors contained in its 1990 Proxy Statement to be filed hereafter is incorporated by reference.

The following table sets forth the names and ages of the registrant's executive officers, together with positions and offices held within the last five years with the registrant by such executive officers. Officers are appointed to serve until the meeting of the Board of Directors following the next Annual Meeting of Stockholders and until their successors have been elected and have qualified.

Name	Age	Position	Term
J. Tracy O'Rourke (Director)	55	Chairman of the Board and Chief Executive Officer	1990-Present
		Executive Vice President and Chief Operating Officer, Rockwell International	1989-1990
		President, Allen Bradley Co.	1978-1989
Allen J. Lauer	53	Executive Vice President	1990-Present
		Senior Vice President and President, Instruments	1989-1990
		President, Instruments	1981-1989
Richard M. Levy	52	Executive Vice President	1990-Present
		Senior Vice President and President, Medical Equipment	1989-1990
		Vice President and President, Medical Equipment	1988-1989
		President, Medical Equipment	1988
		General Manager, Medical Equipment	1986-1988
		Assistant General Manager, Medical Equipment	1981-1986
Al Wilunowski	44	Executive Vice President	1990-Present
		Vice President and President, Electron Devices	1989-1990
		Vice President, Microwave Tube Products	1989
		General Manager, NMR Instruments	1986-1989
		Assistant President, Semiconductor Equipment	1983-1986

Item 10. (continued)

Name	Age	Position	Term
John J. Cooper (Director)	66	Senior Vice President	1990
		Vice President & General Counsel	1987-1990
		Vice President, General Counsel and Secretary	1979-1987

There is no family relationship between any of the executive officers.

Item 11. Executive Compensation

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) The following documents are filed as a part of this report:

(1) Consolidated Financial Statements and Report of Independent Accountants: see the index on page 18 of this report.

(2) Consolidated Financial Statement Schedules: see the index on page 18 of this report.

(3) Exhibits: see the index on page 47 of this report.

3-a Registrant's Restated Certificate of Incorporation, dated June 26, 1987. Exhibit incorporated by reference to registrant's Form 10-K for the year ended October 2, 1987, filed December 22, 1987.

3-b Registrant's Bylaws, dated November 16, 1990. Exhibit incorporated by reference to registrant's Form 8-K filed November 19, 1990.

3-c Registrant's Specimen Stock Certificate. Exhibit incorporated by reference to registrant's Form 8-K for the month of February, 1977, filed March 4, 1977.

SIGNATURES

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

VARIAN ASSOCIATES, INC.
(Registrant)

Date: December 19, 1990

By: /s/ Robert A. Lemos
Robert A. Lemos
Vice President, Finance

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

Signature	Title	Date
/s/ J. Tracy O'Rourke J. Tracy O'Rourke	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	December 19, 1990
/s/ Robert A. Lemos Robert A. Lemos	Vice President, Finance (Principal Financial Officer)	December 19, 1990
/s/ Wayne P. Somrak Wayne P. Somrak	Controller (Principal Accounting Officer)	December 19, 1990
/s/ Kenneth J. Arrow Kenneth J. Arrow	Director	December 18, 1990
/s/ John J. Cooper John J. Cooper	Director	December 14, 1990
Ruth Margaret Davis	Director	-
Edward L. Ginzton	Director	-
/s/ C. Lester Hogan C. Lester Hogan	Director	December 18, 1990

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES

FORM 10-K

INDEX OF FINANCIAL STATEMENTS AND SCHEDULES

The following financial statements of the registrant and its subsidiaries are required to be included in Item 8:

The following financial statement schedules of the registrant and its subsidiaries for the fiscal years ended September 28, 1990, September 29, 1989, and September 30, 1988 are required to be included in Item 14(a):

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

CONSOLIDATED STATEMENTS OF OPERATIONS
Varian Associates, Inc. and Subsidiary Companies

For each of the three fiscal years in the period ended September 28, 1990

(Dollars in thousands except per share amounts)	1990	1989	1988
SALES	$1,264,840	$1,219,604	$1,045,142
OPERATING COSTS AND EXPENSES			
Cost of sales	872,233	853,192	696,657
Research and development	77,402	72,650	69,786
Marketing	156,259	145,707	135,410
General and administrative	75,272	78,819	63,074
Restructuring charges	51,482	-	35,018
Total operating costs and expenses	1,232,648	1,150,368	999,945
OPERATING EARNINGS	32,192	69,236	45,197
Interest expense	(13,021)	(10,791)	(7,915)
Interest income	1,487	1,192	1,583
Other income (expense)	-	(6,100)	15,059
EARNINGS FROM CONTINUING OPERATIONS BEFORE TAXES	20,658	53,537	53,924
Taxes on Earnings	8,060	20,340	19,410
EARNINGS FROM CONTINUING OPERATIONS	12,598	33,197	34,514
LOSS FROM DISCONTINUED OPERATIONS NET OF TAX BENEFITS	(16,690)	(1,678)	(6,756)
NET EARNINGS (LOSS)	$ (4,092)	$ 31,519	$ 27,758
EARNINGS (LOSS) PER SHARE - FULLY DILUTED			
CONTINUING OPERATIONS	$ 0.64	$ 1.61	$ 1.57
DISCONTINUED OPERATIONS	(0.85)	(0.08)	(0.30)
NET EARNINGS (LOSS) PER SHARE	$ (0.21)	$ 1.53	$ 1.27

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
Varian Associates, Inc. and Subsidiary Companies

(Dollars in thousands except per share amounts)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock at Cost	Total
Balances, October 2, 1987	$ 21,966	$ 168,437	$ 247,713	$ -	$ 438,116
Net earnings for the year	-	-	27,758	-	27,758
Issuance of stock under employee stock purchase and option plans	392	8,256	-	-	8,648
Purchase of common stock	-	-	-	(17,840)	(17,840)
Retirement of treasury stock	(684)	(17,156)	-	17,840	-
Dividends declared ($0.26 per share)	-	-	(5,680)	-	(5,680)
Balances, September 30, 1988	21,674	159,537	269,791	-	451,002
Net earnings for the year	-	-	31,519	-	31,519
Issuance of stock under employee stock purchase and option plans	459	10,152	-	-	10,611
Purchase of common stock	-	-	-	(60,570)	(60,570)
Retirement of treasury stock	(2,237)	(58,333)	-	60,570	-
Dividends declared ($0.26 per share)	-	-	(5,281)	-	(5,281)
Balances, September 29, 1989	19,896	111,356	296,029	-	427,281
Net loss for the year	-	-	(4,092)	-	(4,092)
Issuance of stock under employee stock purchase and option plans	563	10,295	-	-	10,858
Purchase of common stock	-	-	-	(28,817)	(28,817)
Retirement of treasury stock	(1,171)	(27,646)	-	28,817	-
Dividends declared ($0.26 per share)	-	-	(5,019)	-	(5,019)
Balances, September 28, 1990	$ 19,288	$ 94,005	$ 286,918	$ -	$ 400,211

See accompanying notes to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include those of Varian Associates, Inc. and its subsidiaries. Significant intercompany balances, transactions, and stock holdings have been eliminated in consolidation. Investments in less-than-majority-owned affiliated companies are stated at equity in the net assets of these companies.

Foreign Currency Translation

Assets and liabilities of subsidiaries outside the United States representing cash and amounts receivable or payable are translated into U.S. dollars at the exchange rates in effect at year end. Other accounts including inventories and property, plant, and equipment are translated at historical exchange rates. Revenue and expense items are translated at effective rates of exchange prevailing during each year, except that inventories are charged to cost of sales, and depreciation is expensed at historical exchange rates. The aggregate exchange gain (loss) included in general and administrative for 1990, 1989, and 1988 was \$6.5 million, (\$4.8) million, and \$1.4 million, respectively.

The Company obtains forward exchange contracts in order to mitigate the effects of foreign exchange rate changes on net monetary balances and order backlog. At fiscal year-end 1990, the Company had contracts with maturities of three months or less to purchase \$46.5 million in foreign currency (25.3 million pounds sterling).

Revenue Recognition

Sales and related cost of sales are recognized primarily upon shipment of products. Sales and related cost of sales under long-term contracts to commercial customers and the U.S. Government are recognized primarily as units are delivered.

The estimated sales values of performance under certain U.S. Government fixed-price and fixed-price incentive contracts in process are recognized under the percentage of completion method of accounting where the sales value is determined on the basis of physical completion and costs are expensed as incurred. Sales under cost-reimbursement contracts, primarily research and development contracts, are recorded as costs are incurred and include estimated earned fees in the proportion that costs incurred to date bear to total estimated costs. The fees under certain U.S. Government contracts may be increased or decreased in accordance with cost or performance incentive provisions which measure actual performance against established targets or other criteria. Such incentive fee awards or penalties are included in revenue at the time the amounts can be reasonably determined.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The main components of property, plant, and equipment are as follows:

(Dollars in millions)	1990	1989
Land and land leaseholds	$ 9.4	$ 14.3
Buildings	153.4	172.3
Machinery and equipment	279.9	301.2
Construction in progress	17.7	23.4
Total Property, Plant, and Equipment	$460.4	$511.2

Taxes on Earnings

Deferred recoverable tax benefits of $93.5 million at fiscal year-end 1990 and $70.0 million at fiscal year-end 1989 are included in other current assets. These resulted principally from product warranty provisions, inventory reserves, reserves for discontinued operations, and special provisions not currently deductible for tax purposes. In addition, other current assets include refundable taxes of $3.2 million at fiscal year-end 1990 and $3.2 million at fiscal year-end 1989, resulting from the carryback of operating losses and credits. Deferred tax credits of $38.7 million at fiscal year-end 1990 and $34.9 million at fiscal year-end 1989 arose primarily from the use of accelerated depreciation methods for tax purposes and from foreign tax credits not yet utilized for financial reporting purposes.

The Company plans to continue reinvesting earnings of its non-U.S. subsidiaries to expand its international activities. Therefore, it makes no provision for additional U.S. taxes which might result from distribution of such earnings unless they are actually repatriated. In 1990, the Company repatriated $2.5 million of earnings from a non-U.S. subsidiary, providing U.S. tax of $1.4 million. Amounts repatriated in 1989 and 1988 were not significant. At fiscal year-end 1990, 1989, and 1988, the cumulative amount of earnings from certain subsidiaries on which the Company has not provided U.S. income taxes was approximately $29 million, $22 million, and $19 million, respectively.

The Company has a Foreign Sales Corporation (FSC) to assist with its export activities. A portion of the earnings of the FSC is taxable and provision has been made for those taxes.

In December 1987, the Financial Accounting Standards Board (FASB) issued Statement No. 96, Accounting for Income Taxes (FAS 96). This statement requires a major change in the method used to account for income taxes. The statement is effective for the Company's fiscal year 1993; earlier adoption is permitted and baing considered. The FASB is currently reconsidering certain relevant aspects of FAS 96. The Company is currently studying the implications of the statement, but the timing and impact of its implementation has not yet been determined.

DISCONTINUED OPERATIONS

During 1990, the Company announced plans to sell its broadcasting equipment operations in England and Texas and gallium arsenide-based units in California. These businesses are being accounted for as discontinued operations. The sale of Continental Electronics in Texas was consummated in September, 1990. The Company received $12 million in cash and notes for $2.9 million. Formal plans have been developed, and it is expected that the divestitures of the remaining operations will be completed within one year. Amounts in the consolidated statements of operations for 1989 and 1988 have been restated to conform to the 1990 discontinued operations presentation. The estimated loss on discontinuance of the businesses was $15.2 million (net of income tax benefits of $7.3 million) consisting of an expected aftertax loss on the sale of the businesses of $7.7 million and a provision of $7.5 million for expected operating losses during the phase-out period of one year. Sales and net losses from the discontinued operations prior to the measurement date are as follows:

(Dollars in millions)	1990	1989	1988
Sales	$ 67.1	$132.8	$133.6
Loss before tax benefits	2.4	2.7	10.6
Tax benefits	.9	1.0	3.8
Loss from operations	1.5	1.7	6.8
Loss on disposal, net of tax benefits of $7.3 in 1990	15.2	-	-
Net Loss	$ 16.7	$ 1.7	$ 6.8

The net assets of the discontinued businesses held for sale have been included in the accompanying balance sheet at September 28, 1990, under the caption "Net assets held for sale - discontinued operations." This balance consists of current assets of $37.1 million, noncurrent assets of $28.1 million, and current liabilities of $20.1 million.

LONG-TERM DEBT

(Dollars in millions)	1990	1989
Unsecured term loan, LIBOR+1/4% (effectively fixed at 8.27% through December 31, 1991 through an interest rate exchange agreement), due December 31, 1992	$ 40.0	$ -
Unsecured term loan, 9.9% due in annual installments of $6.0 through 1994	24.0	30.0
Unsecured term loan, 9.5% due in annual installments of $2.5 through 1995	12.5	15.0
Mortgage loans, interest rates range from 9.5% to 9.88% payable through 2005	8.5	18.4
Other	.7	1.8
Long-term borrowings	85.7	65.2
Less current portion	8.9	10.3
Long-Term Debt	$ 76.8	$ 54.9

Each of the unsecured term loans contain covenants which limit future borrowings and require the Company to maintain certain levels of working capital and operating results. At fiscal year-end 1990, the Company was in compliance with all restrictive covenants of the loan agreements and approximately $21.6 million of retained earnings were unrestricted for payment of cash dividends. Mortgage loans are collateralized by various land and buildings.

Required principal repayments of long-term debt for fiscal years 1991 through 1995 are as follows, in millions: $8.9, $8.9, $48.9, $10.0, and $2.9.

Interest paid on short-term and long-term debt was $14.0 million in fiscal 1990, $10.4 million in fiscal 1989 and $7.9 million in fiscal 1988.

STOCK OPTION AND PURCHASE PLANS

As of fiscal year-end 1990, the Company had reserved 2,344,000 shares of common stock for issuance to officers and key employees under stock option plans. All options under the incentive and non-qualified plans have been granted at prices equal to the fair market value of the stock on the date of grant.

Options granted on or before February 10, 1987 are exercisable commencing one year following date of grant, expire if not exercised within ten, seven, or five years from date of grant, and, based on issue date, are exercisable in cumulative installments of one-quarter, one-third, or one-half each year. Options granted on or after February 11, 1987 are exercisable in cumulative installments of one-third each year, commencing one year following date of grant, and expire if not exercised within seven years from date of grant.

PREFERRED STOCK PURCHASE RIGHTS (continued)

The rights are exercisable ten days after a person or group has acquired 15% or more of the Company's voting stock or the tenth day (or such later date as may be determined by the Board of Directors) after the date of the commencement or announcement of a person's or group's intention to commence a tender or exchange offer whose consummation will result in the ownership of 30% or more of the stock. If a person or group becomes the beneficial owner of 15% or more of the voting stock, each right would entitle the holder, other than the acquiring person or group, to buy shares of the Company's Series A Junior Participating Preferred Stock having a market value of $250 for the exercise price of $125. If the Company were to be merged into another entity, or merge with another entity and the common stock were changed into other securities or assets, each right would entitle the holder to purchase for the exercise price of $125, common stock of the acquiring company equal to a market value of twice the exercise price, or $250.

The rights expire on August 25, 1996 but may be redeemed by the Board of Directors of the Company for $.05 per right at any time before they become exercisable.

RETIREMENT PLANS

The Company has several defined contribution retirement plans covering substantially all of its employees. Total pension expense amounted to $15.8 million for fiscal 1990, $16.4 million for fiscal 1989, and $13.5 million for fiscal 1988. The major obligation is to contribute an amount based on a percentage of each participants' base pay. The Company also contributes 5% of its consolidated earnings from continuing operations before taxes, as adjusted for discretionary items, as retirement plan profit sharing. Participants are entitled, upon termination or retirement, to their portion of the retirement fund assets, which are held by a third-party trustee.

A number of the Company's foreign subsidiaries have defined benefit retirement plans for regular full-time employees. The Company adopted the provisions of Statement of Financial Accounting Standards No. 87, "Employer's Accounting for Pensions," for its foreign retirement plans effective with fiscal 1990. The 1990 pension amount includes the income effect of the adoption which was not material to the Company's consolidated financial statements.

TAXES ON EARNINGS (continued)

The reconciliation between the effective tax rates on continuing operations and the statutory federal income tax rates is shown in the following schedule:

	1990	1989	1988
Statutory federal income tax rate	34.0 %	34.0 %	34.0 %
State and local taxes, net of federal tax benefit	6.2	5.6	2.5
Net investment tax credit recapture	0.5	0.4	0.6
Foreign income deemed permanently invested, net of foreign tax credits utilized and foreign taxes	4.3	2.0	0.5
FSC/DISC	(5.5)	(3.0)	1.4
Inventory adjustment on discontinued operations	-	-	(1.8)
Charitable contributions	-	(0.6)	(0.9)
Other	(0.5)	(0.4)	(0.3)
Effective Tax Rate	39.0 %	38.0 %	36.0 %

Income taxes paid (refunded) are as follows:

(Dollars in millions)	1990	1989	1988
Federal income taxes paid	$ 6.9	$ 12.7	$ 1.6
Federal income taxes refunded from prior years	-	(0.5)	(5.3)
State income taxes paid, net	3.9	5.0	1.3
Foreign income taxes paid, net	4.3	11.1	7.1
Total Paid	$ 15.1	$ 28.3	$ 4.7

The amounts refunded in 1989 and 1988 are the result of Net Operating Loss and General Business Tax Credit carrybacks from 1987 to 1984 and from 1986 to 1983 and 1984, respectively.

LEASE COMMITMENTS

At fiscal year-end 1990, the Company was committed to minimum rentals under noncancellable operating leases for fiscal years 1991 through 1995 and thereafter as follows, in millions: $14.2, $11.3, $8.5, $5.2, $2.9, and $4.5. Rental expense for fiscal years 1990, 1989, and 1988 was $33.8, $32.9, $34.0, respectively.

CONTINGENCIES (continued)

The Company is involved in various stages of investigation and cleanup relative to environmental protection matters, some of which relate to past disposal practices. Some of these matters are being overseen by state or federal agencies. Management believes that the final disposition of these matters will not have a material adverse effect on the financial condition of the Company.

BUSINESS SEGMENTS

Prior year industry segment data has been restated to conform with the current year presentation of continuing operations. The four industry segments are: Electron Devices business, Instruments business, Semiconductor Equipment business, and the Medical Equipment business. Indirect and common costs have been allocated through the use of estimates. Accordingly, the information is provided for purposes of achieving an understanding of operations, but may not be indicative of the financial results of the reported segments were they independent organizations. In addition, comparisons of the Company's operations to similar operations of other companies may not be meaningful.

The Electron Devices business includes a broad line of electron devices used in broadcasting, communications, and other commercial and military applications. The Instruments business consists of analytical instruments widely used in the fields of chemistry, physics, biology, life sciences, and metallurgy. The Semiconductor Equipment business includes equipment used for semiconductor wafer fabrication. The Medical Equipment business includes linear accelerators used for cancer therapy and industrial testing and inspection. Included in Eliminations and Other are certain insignificant support operations and the Vacuum Products operation.

The Company operates various manufacturing and marketing operations outside the United States. Geographic segment information is based on the location of the operation furnishing goods and services. No single country outside the United States accounts for more than 10% of total sales or total assets. Sales between geographic areas are accounted for at cost plus prevailing markups arrived at through negotiations between independent profit centers. Related profits are eliminated in consolidation.

Included in the total of United States sales are export sales of $203 million in fiscal 1990, $210 million in fiscal 1989, and $166 million in fiscal 1988. Sales under prime contracts from the U.S. Government were approximately $90 million in fiscal 1990, $111 million in fiscal 1989, and $119 million in fiscal 1988.

GEOGRAPHIC SEGMENTS

(Dollars in millions)	Sales to Unaffiliated Customers			Intergeographic Sales to Affiliates			Total Sales			Pre-Tax Operating Earnings (Loss)			Identifiable Assets		
	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988
United States	$ 883	$ 883	$ 744	$ 194	$ 158	$ 136	$1,077	$1,041	$ 880	$ 31	$ 78	$ 61	$ 484	$ 507	$ 418
International	322	283	253	41	35	51	363	318	304	18	12	20	179	153	144
Eliminations & Other	60	54	48	(235)	(193)	(187)	(175)	(139)	(139)	(7)	(10)	(13)	64	61	69
Total Geographic Segments	1,265	1,220	1,045	-	-	-	1,265	1,220	1,045	42	80	68	727	721	631
General Corporate	-	-	-	-	-	-	-	-	-	(9)	(16)	(8)	151	102	115
Interest, Net	-	-	-	-	-	-	-	-	-	(12)	(10)	(6)	-	-	-
Continuing Operations	$1,265	$1,220	$1,045	$ -	$ -	$ -	$1,265	$1,220	$1,045	$ 21	$ 54	$ 54	$ 878	$ 823	$ 746

1990 results include a restructuring charge of $51.5 million for expenses related to the phasing out of certain product lines, and other related expenses including employee terminations, facility consolidations, and asset revaluations.

1989 results include General Corporate charges for anticipated legal expenses of $6.1 million in connection with an ongoing government investigation of the power grid tube industry.

1988 results include restructuring charges of $35.0 million and the gain on the sale of Specialty Metals of $15.0 million.

COMMON STOCK PRICES (UNAUDITED)

	1990				1989			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Common Stock								
High	$25 7/8	26 1/4	29 1/8	34 3/4	$30 1/4	30 5/8	28 5/8	28 3/8
Low	$19 7/8	20	23 1/8	27 7/8	$25 1/2	25 3/4	23 1/2	23 1/2
Dividends Declared Per Share	$.065	.065	.065	.065	$.065	.065	.065	.065

SCHEDULE V

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
PROPERTY, PLANT, AND EQUIPMENT (1)
for the fiscal years ended 1990, 1989 and 1988
(Dollars in Millions)

Classification	Balance at Beginning of Period	Additions	Retirements	Other Changes (2)	Balance at End of Period
FISCAL YEAR ENDED 1988:					
Land and land leaseholds	$ 14.0	$ 0.3	$ (0.2)	$ -	$ 14.1
Buildings	155.4	8.3	(4.6)	(0.4)	158.7
Machinery and equipment	270.9	36.1	(21.8)	(0.1)	285.1
Construction in progress	18.3	3.5	-	(7.1)	14.7
Total	$ 458.6	$ 48.2	$ (26.6)	$ (7.6)	$ 472.6
FISCAL YEAR ENDED 1989:					
Land and land leaseholds	$ 14.1	$ 0.2	$ -	$ -	$ 14.3
Buildings	158.7	15.8	(1.0)	(1.2)	172.3
Machinery and equipment	285.1	27.1	(15.3)	4.3	301.2
Construction in progress	14.7	6.3	-	2.4	23.4
Total	$ 472.6	$ 49.4	$ (16.3)	$ 5.5	$ 511.2
FISCAL YEAR ENDED 1990:					
Land and land leaseholds	$ 14.3	$ -	$ (2.2)	$ (2.7)	$ 9.4
Buildings	172.3	8.1	(6.4)	(20.6)	153.4
Machinery and equipment	301.2	37.4	(19.1)	(39.6)	279.9
Construction in progress	23.4	7.6	-	(13.3)	17.7
Total	$ 511.2	$ 53.1	$ (27.7)	$ (76.2)	$ 460.4

(1) See accompanying notes to the consolidated financial statements.

(2) Capitalization of construction in progress, acquisitions and sales of businesses, and reclassifications for discontinued operations.

SCHEDULE VIII

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
VALUATION AND QUALIFYING ACCOUNTS (1)
for the fiscal years ended 1990, 1989, and 1988
(Dollars in Thousands)

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions Description	Deductions Amount	Balance at End of Period
ALLOWANCE FOR DOUBTFUL NOTES & ACCOUNTS RECEIVABLE:					
Fiscal Year Ended 1988	$ 1,788	$ 760	Write-offs & Adjustments	$ (511)	$ 2,037
Fiscal Year Ended 1989	$ 2,037	$ 433	Write-offs & Adjustments	$ (759)	$ 1,711
Fiscal Year Ended 1990	$ 1,711	$ 755	Write-offs & Adjustments	$ (614)	$ 1,852
ESTIMATED LIABILITY FOR PRODUCT WARRANTY:					
Fiscal Year Ended 1988	$ 23,586	$ 30,199	Actual Warranty Expenditures	$ (29,684)	$ 24,101
Fiscal Year Ended 1989	$ 24,101	$ 38,156	Actual Warranty Expenditures	$ (32,347)	$ 29,910
Fiscal Year Ended 1990	$ 29,910	$ 42,758	Actual Warranty Expenditures	$ (38,408)	$ 34,260

(1) As to column omitted the answer is "none".

SCHEDULE X

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
SUPPLEMENTARY INCOME STATEMENT INFORMATION
for the fiscal years ended 1990, 1989, and 1988
(Dollars in thousands)

Item	1990	1989	1988
Maintenance and repairs	$30,038	$29,980	$27,195
Depreciation expense	$37,917	$34,039	$33,752
Advertising costs	$ 9,761	$10,681	$10,579

Amounts for amortization of intangible assets and other deferrals, taxes other than payroll and income taxes and royalties are not presented as such amounts are less than 1% of total sales.

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
COMPUTATION OF EARNINGS PER SHARE IN ACCORDANCE
WITH INTERPRETIVE RELEASE NO. 34-9083

EXHIBIT 11

(Shares in Thousands)	1990	1989	1988
Actual weighted average shares outstanding for the period	19,391.0	20,623.0	21,663.4
Dilutive employee stock options using average market price	147.0	36.0	93.0
Total shares based on shares outstanding and the assumption that all stock options will be exercised at average stock market price	19,538.0	20,659.0	21,756.4
Additional dilutive employee stock options using ending market price	-	-	78.0
Total shares based on shares outstanding and the assumption that all stock options will be exercised at ending market price	19,538.0	20,659.0	21,834.4
(Dollars in millions, except per share amounts)			
Earnings from continuing operations	$ 12.6	$ 33.2	$ 34.5
Loss from discontinued operations	(16.7)	(1.7)	(6.7)
Net earnings (loss) applicable to fully diluted earnings per share	$ (4.1)	$ 31.5	$ 27.8
Earnings (loss) per share based on SEC interpretive release No. 34-9083:			
Earnings from continuing operations	$ 0.64	$ 1.61	$ 1.57
Loss from discontinued operations	(0.85)	(0.08)	(0.30)
Net earnings (loss) per share	$ (0.21)	$ 1.53	$ 1.27

Coopers
&Lybrand

certified public accountants

Exhibit 24

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Prospectuses constituting part of the Registration Statements of Varian Associates, Inc. on Forms S-8 (Nos. 33-6661, 2-95139, 33-1425, 33-33660) of our report dated October 19, 1990, on our audits of the consolidated financial statements and the financial statement schedules of Varian Associates, Inc. as of September 28, 1990 and September 29, 1989 and for each of the three fiscal years in the period ended September 28, 1990, which report is included in this Annual Report on Form 10-K.

Coopers & Lybrand
COOPERS & LYBRAND

San Jose, California
December 17, 1990

"SECTION COPY"

030-10763

varian

March 7, 1991

Mailed Certified,
Return Receipt Requested

Mr. Eric Reber
U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Re: Varian/Beverly Microwave Division
License No. 20-02237-04
Financial Assurance for Decommissioning

Dear Mr. Reber:

Enclosed please find our "Letter from the Chief Financial Officer" demonstrating financial assurance for decommissioning through use of Financial Test, Alternative I. Also enclosed is a separate letter from Coopers & Lybrand, Varian's independent accountants, confirming the figures used in the test.

Additionally, enclosed you will find copies of Varian's Annual and 10-K Reports for the fiscal year ended September 28, 1990.

If you should have any questions or require additional information, please do not hesitate to contact me:

Varian Associates, Inc.
3100 Hansen Way #E-220
Palo Alto, CA 94303

Sincerely,

Arlyne Titus

Arlyne Titus
Insurance Analyst

MAR 11 1991

(415) 424-5357

Enc.

cc: J. McKinley

OFFICIAL RECORD COPY ML 10

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varian

February 25, 1991

U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Re: Varian/Beverly Microwave Division
License No. 20-02237-04

I am the Chief Financial Officer of Varian Associates, Inc., 3100 Hansen Way, Palo Alto, California, a corporation. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in 10 CFR Part 30.

This firm guarantees, through the parent company guarantee submitted to demonstrate compliance under 10 CFR Part 30, the decommissioning of the following facility owned or operated by this firm. The current cost estimates or certified amounts for decommissioning, so guaranteed, are shown for each facility:

Name of Facility	Location of Facility	Certified Amount or Current Cost Estimates
Varian/Beverly Microwave Div.	8 Salem Road Beverly, MA 01915	$750,000 (Certified Amount)

This firm is required to file a Form 10K with the U.S. Securities and Exchange Commission for the latest fiscal year.

This fiscal year of this firm ended on September 28. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements and footnotes for the latest completed fiscal year, ended September 28, 1990.

Varian Associates, Inc. 611 Hansen Way P. O. Box 10800 Palo Alto, California 94303-0883 U.S.A.
415/493-4000 FAX 415/493-0307 Telex 348476

FINANCIAL TEST: ALTERNATIVE I

1.	Decommissioning cost estimates or certified amounts for facility License No. 20-02237-04................	$	750,000
*2.	Total liablities	$	523,363,000
*3.	Tangible Net Worth **..............................	$	378,030,336
*4.	Net Worth	$	400,211,000
*5.	Current assets	$	667,797,000
*6.	Current liabilities	$	407,846,000
*7.	Net working capital (line 5 minus line 6)	$	259,951,000
*8.	The sum of net income plus depreciation, depletion, and amortization	$	41,535,000
*9.	Total assets in United States	$	484,000,000
10.	Is line 3 at least $10 million?		YES
11.	Is line 3 at least 6 times line 1?		YES
12.	Is line 7 at least 6 times line 1?		YES
13.	Are at least 90 percent of firm's assets located in the United States? If not, complete line 14		NO
14.	Is line 9 at least 6 times line 1?		YES
15.	Is line 2 divided by line 4 less than 2.0?		YES
16.	Is line 8 divided by line 2 greater than 0.1?		NO
17.	Is line 5 divided by line 6 greater than 1.5?		YES

* Denotes figures derived from financial statements
** Tangible net worth is defined as net worth minus goodwill, patents, trademarks, and copyrights

I hereby certify that the content of this letter is true and correct to the best of my knowledge.

Robert A. Lemos
Vice President, Finance

February 25, 1991

RAL:AKT

Coopers
&Lybrand

certified public accountants

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors
of Varian Associates, Inc.

We have audited the consolidated balance sheet of Varian Associates, Inc. and subsidiary companies as of September 28, 1990, and the related consolidated statements of earnings, shareholders' equity, and cash flows for the year then ended and have issued our report thereon dated October 19, 1990. 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 audit.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

We have compared the data which the letter to the U.S. Nuclear Regulatory Commission, Region One Office, dated February 25, 1991, from the Chief Financial Officer of Varian Associates, Inc. specifies as having been derived from the independently audited financial statements for the year ended September 28, 1990, to the financial statements and supporting schedules we audited and found it to be in agreement.

Coopers & Lybrand

San Jose, California
February 25, 1991

Annual Report 1990

Operational Excellence:

Our most effective strategic weapon.

varian

Annual Report 1990

Operational Excellence:

Our most effective strategic weapon.

varian

HIGHLIGHTS

Dollars in millions except per share amounts

Fiscal Years	1990	1989
Sales	$ 1,264.8	$ 1,219.6
Net Earnings (Loss):		
Continuing Operations	12.6	33.2
Discontinued Operations	(16.7)	(1.7)
Net Earnings (Loss)	$ (4.1)	$ 31.5
Net Earnings (Loss) Per Share—Fully Diluted:		
Continuing Operations	0.64	1.61
Discontinued Operations	(0.85)	(0.08)
Net Earnings (Loss) Per Share	$ (0.21)	$ 1.53
Shares Outstanding at Year End (in thousands)	19,288	19,896
Stockholders' Equity	$ 400.2	$ 427.3
Stockholders' Equity Per Share Outstanding	$ 20.75	$ 21.48
Order Receipts	$ 1,266.6	$ 1,263.3
Order Backlog	$ 736.5	$ 727.3
Employees at Year End	10,200	10,700

COVER: *Operational Excellence, Varian's strategic weapon for the 1990s, demands* [illegible] *focus on customer needs. Varian Thin Film Systems and Research Center* [illegible] *working hand in hand with leading semiconductor device manufacturers to refine* [illegible] *the next generation of chips. At the same time, they are developing* [illegible] *integrated processing system that will perform those state-of-* [illegible]

PROFILE: *Varian Associates is a diversified international electronics company that* [illegible] *and markets high-technology systems and components for applications* [illegible] *Major product lines include electron tubes for communications, radar,* [illegible] *medicine, and industrial uses; analytical instruments for* [illegible] *equipment for the semiconductor industry; radiation* [illegible] *and industrial inspection; and vacuum equipment and leak* [illegible] *The Company has manufacturing sites in* [illegible]

CONTENTS

During 1990 Varian began a sweeping change in corporate direction best exemplified by its drive to achieve Operational Excellence. Unlike previous strategies that lived largely on paper, the elements of Operational Excellence are dynamic, filtering through every level of the organization, and laying the critical base on which the Company will build its future. Operational Excellence encompasses five key elements.

Commitment to Quality— *A deep-seated belief that the Company must deliver products and services that meet realistic, clearly defined customer requirements on time, every time. Employees work in ways that ensure that customer expectations are met.*

Customer Focus— *An operating orientation in which the Company continually invests the time needed to understand customers and their needs and delivers the products or services that satisfy those needs.*

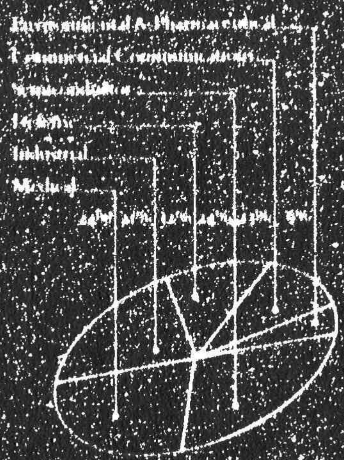
Excellent Time to Market— *A method of operation that combines teamwork and concurrent engineering to ensure that new products are consistently introduced to the marketplace during the critical window of opportunity which allows maximum product life and optimum profit potential.*

Flexible Factories— *Manufacturing operations that are designed to deliver a wide variety of products competitively. Such facilities are capable of responding quickly to changing demand, and still meeting customers' expected delivery dates.*

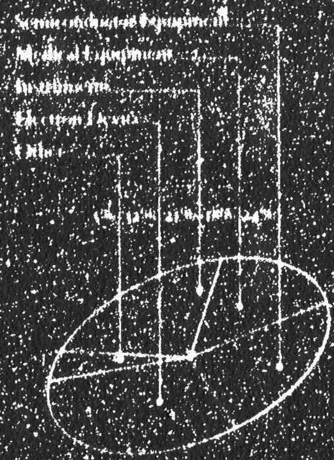
Organizational Excellence— *A company whose structure, actions, and workforce are honed to deliver the best net comparative customer value. Implicitly customer oriented, the employees themselves are a competitive advantage, because they are better trained, equipped, and organized to meet customer needs, regardless of geographic or technological boundaries.*

The people of Varian are committed to achieving world-class superiority in each of these elements, thus reaching true Operational Excellence.

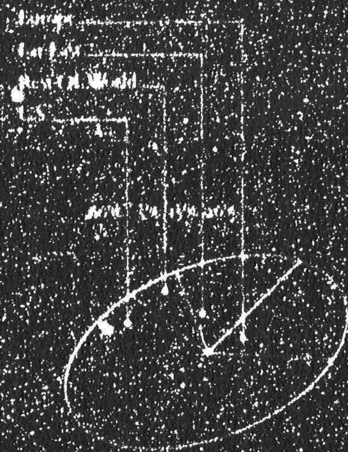
Sales by Market Served



Sales by Business

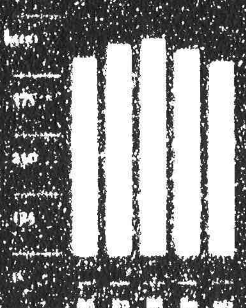


Sales by Geographic Region*

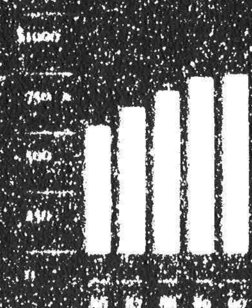


*Shows final destination of products sold

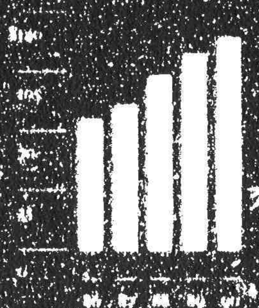
Shareholders' Equity
(dollars in millions)



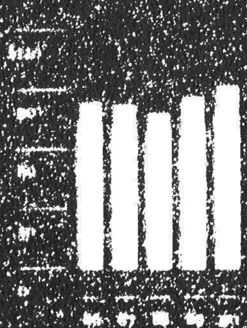
Order Backlog
(dollars in millions)



Sales per Employee:
Continuing Operations
(dollars in thousands)

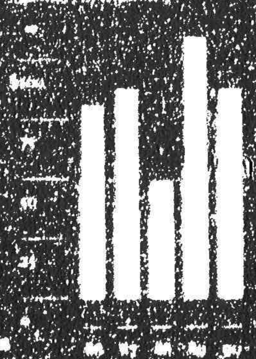


R&D Expenditures
(dollars in millions)



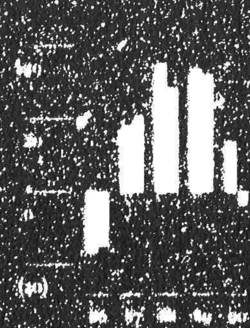
- Customer-Sponsored
- Company-Sponsored

Debt
(dollars in millions)



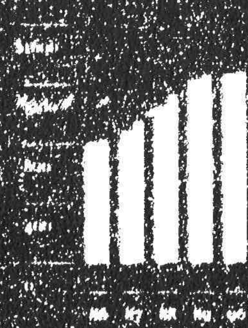
- Short-Term
- Long-Term

Earnings (Loss) from
Continuing Operations
(dollars in millions)



- Earnings (loss) from continuing operations
- Net Earnings (loss)

Order Receipts and Sales
(dollars in millions)



- Sales
- Order Receipts

There is always risk in predicting how history will ultimately view a given time and sequence of events, but 1990 seems certain to go down as a true milestone for Varian in several respects.

It was a year that brought fundamental changes in our top management team, our organizational structure, and in how we operate. It included actions to focus our core businesses, to capitalize on our traditional strengths, to stimulate our people, and to reshape our culture, injecting a greater sense of urgency in virtually everything we do.

The purpose of these actions, simply stated, is to end the erratic financial and operational performance that were too often apparent in the 1980s. Successfully implemented, they will make the 1990s a decade of consistently better operating results and substantially enhanced shareholder value.

These actions will be carried out through a management approach best described as "integrated independence." It recognizes that we can have diverse core businesses that must operate very differently in some ways. Yet in the important things—basic values and beliefs, a common strategic vision, shared management practices—they can be welded together into a single, effective force. Integrated independence provides the latitude to pursue common goals, along with the flexibility needed to empower our people for greater individual decision making, the initiation of continuous improvements, and accelerated speed and responsiveness.

As nearly as possible, we want a seamless organization which, while it might be made up of four or five distinctly different businesses, thinks and acts as a single entity. You do that by building ever closer relationships, by partnering with co-workers, with customers, with suppliers—those people and organizations that hold the keys to your success.

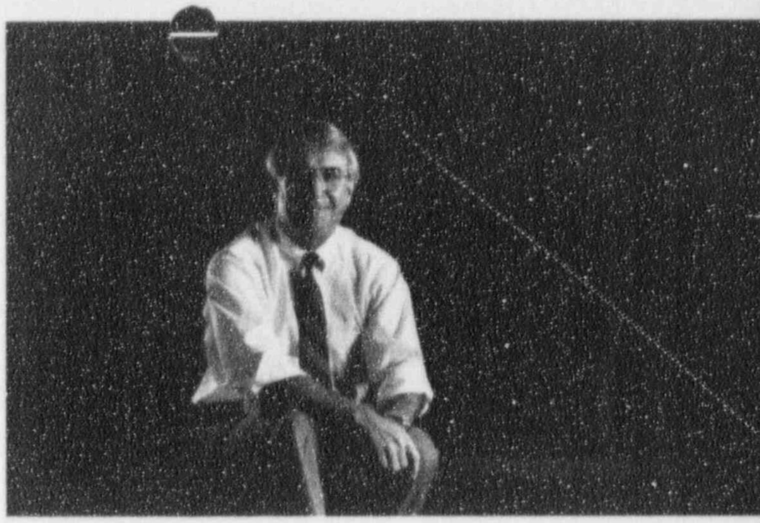
We have islands of excellence throughout Varian, in quality, in manufacturing, in responding to customer needs. Right alongside those success stories, we have other business units with dismal results in the same areas. We're beginning to correct these situations through a network of Excellence Action Teams organized to share our best practices across the Company.

This approach will be particularly important in our drive to make Varian a global organization. In 1990, 40% of our sales came from international markets. As growth abroad continues to outstrip domestic market expansion, our aim is to attract more than half our sales from customers outside the U.S. Clearly the elimination of internal and external barriers to meeting our customers' needs worldwide must be one of our top priorities for the 1990s.

Our plan to revitalize Varian has three phases, the first of which was initiated in May. It included a management reorganization resulting in the election of Allen Lauer, Richard Levy, and Al Wilunowski to newly created executive vice president positions. In their expanded roles, these senior managers are responsible for leading our major businesses as well as sharing the direction of most of our support staff functions with me. This gives us a strong, unified, and thoroughly experienced team to lead Varian's revitalization.

This initial phase also involved the sale of a number of non-core businesses and product lines by year's end, along with a commensurate reduction in staff. These steps have been largely completed and resulted in a $74 million charge taken in the third quarter. While Varian reported a $4 million net loss for 1990 because of these charges, results from continuing operations (before restructuring charges) rose 33% over the prior year to $44 million. Orders and sales on the same basis were at or near record levels, and the Company enjoyed excellent total cash flow of $26 million.

The second phase of our plan was launched in the final quarter of the year and will extend well into 1991. It is built around the concept of



J. Tracy O'Rourke joined Varian as Chairman of the Board and Chief Executive Officer on February 27, 1990.

Operational Excellence, the elements of which are detailed on the opening page of this report. Their thrust—an all-consuming customer focus, unbending commitment to quality, flexible and responsive factories, faster time to market, and organizational excellence—will not be just another program, but a way of life for us.

These keys to Varian's revitalization are critical to pursuing our philosophy of achieving and maintaining market share leadership in our major core businesses. If we execute well, they will give us a posture of global competitiveness in whatever market segments and niches we choose to serve.

Along with more effectively satisfying customer needs, Operational Excellence is aimed at

"Operational Excellence is aimed at improving our profit margins to the levels shareholders have a right to expect..."

Al Wilunowski, Allen Lauer, and Richard Levy (from left) were elected Executive Vice Presidents of the corporation in May.

improving our profit margins to the levels shareholders have a right to expect. Vagaries of the world economy aside, we have multiple opportunities to improve our financial results by simply improving our execution and bringing our manufacturing and marketing capabilities into better balance with our technical strength. With a committed work force and consistent management direction, such improvements are readily within our reach.

Proceeds from the sale of our non-core activities, along with the gross profit improvement we expect from better operating performance, will be used to finance increased investments in research and development and enhanced productivity. In addition, we will consider using these funds for closely aligned growth opportunities and various other actions to enhance shareholder value.

We will begin to address how we accelerate the pace at which we grow our core businesses, the third phase of our revitalization plan, in early 1991. However, implementation of these steps will be deferred until we are entirely satisfied that phase two and its promise of improved operating performance is firmly established. Cultural change never comes easily, and we are committed to bringing it about in a manner that is both palatable and permanent.

Our employees have tremendous desire to excel at what they do. That, along with their willingness to embrace change, to try new ways of doing things, has been the most encouraging part of my introduction to Varian. Our people truly want to be winners, not only in technical innovation, but in every aspect of meeting customer needs. They are beginning to appreciate how, in a global marketplace, technology can no longer be the only thing that sets us apart from competitors. They are excited by the idea of empowerment, that they can take charge of what they do, make a difference in how it comes out, and see how that affects the success of the organization.

We have capable and experienced management, a sound financial position, and strong core businesses. But in the final analysis, our future rests with our people. We want them to be the best trained, best equipped, best motivated team in the marketplace. We have both the resources and the will to accomplish that. We are convinced that Operational Excellence is our most effective strategic weapon. How well we achieve it will be readily apparent in our results in the months ahead.

J. Tracy O'Rourke

J. Tracy O'Rourke
Chairman of the Board and Chief Executive Officer

December 14, 1990

ELECTRON DEVICES

Varian's Electron Devices business is the world's largest manufacturer of microwave, power-grid, and X-ray tubes and related equipment such as amplifiers and power supplies. Primary global markets include medical, communications, defense, industrial, and energy research.

Orders and backlog for this business declined for the year, while sales rose only modestly, reflecting the relatively flat commercial market and slumping defense business. Profits from continuing operations before restructuring, however, rebounded strongly compared to those of 1989, and margins reached double-digit levels late in the year.

Overview Phase 1 of Varian's financial turnaround program called for the Company to divest a number of non-core business units and product lines, several of which manufacture transmitters or solid-state devices within Electron Devices. This allowed the business to concentrate its efforts on its core opportunities, a focus which contributed to the significant earnings increase demonstrated in fiscal 1990 before restructuring costs.

Several improvement programs begun in 1989 and accelerated in 1990 helped increase the profitability of this business. Headcount was reduced, and bidding practices were revised to direct efforts only toward new contracts that offer acceptable levels of profitability. Inventories have been reduced, with several business units cutting the time it takes to manufacture certain products by some 50%, moving parts inventory into finished goods that much more quickly.

Formalized program management techniques have been implemented throughout the organization, providing a more systemized approach to real-time planning, monitoring, and reporting on significant projects including new product development and implementation of Operational Excellence techniques. With the employment of cross-functional program management teams, new products are now being engineered concurrently to meet customer requirements as well as cost-effective manufacturing parameters. This has significantly reduced development costs on new products while improving quality and on-time delivery.

ELECTRON DEVICES

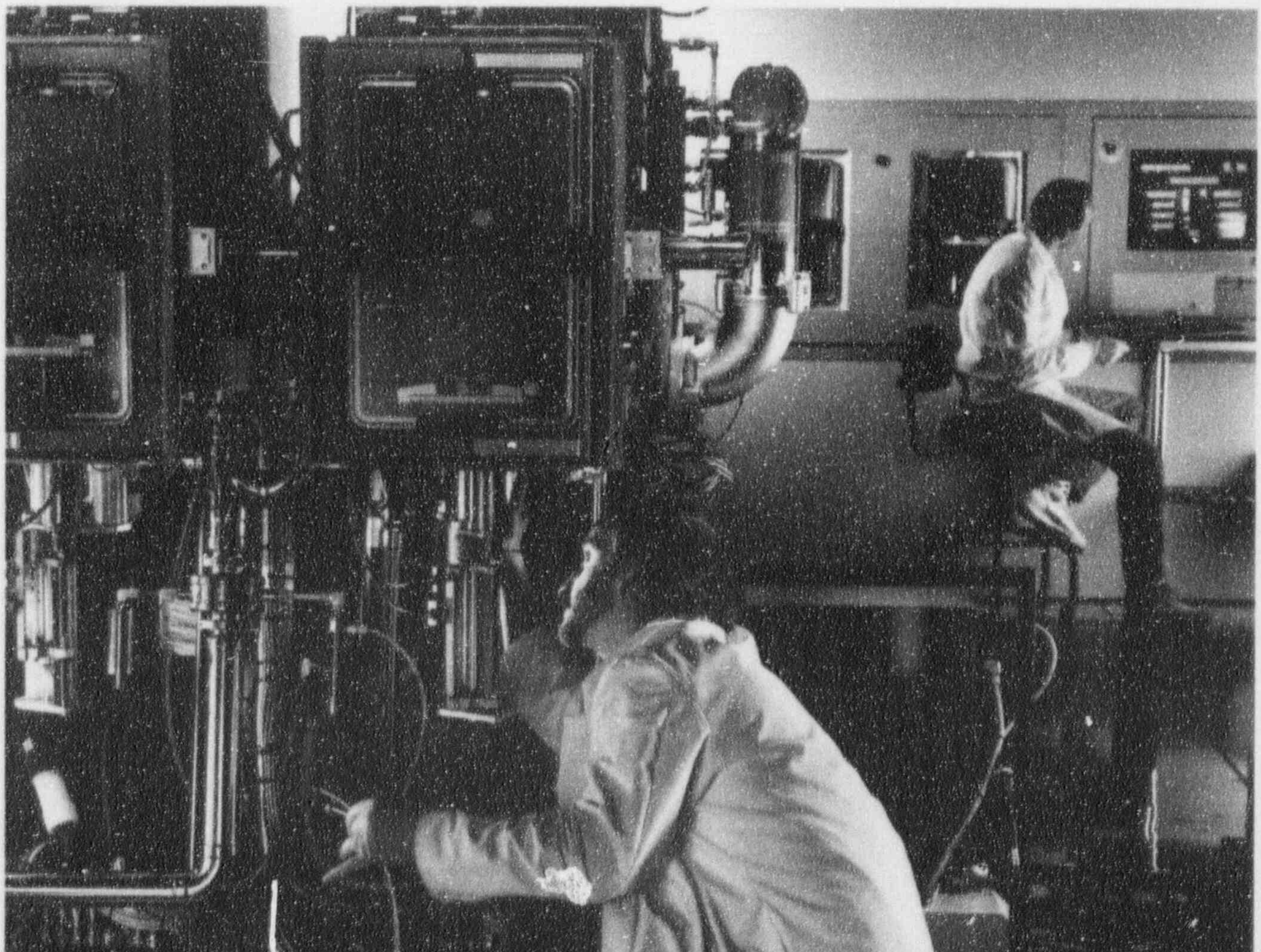
(Dollars in Millions)	1990	1989	1988
Orders	$ 393	$ 416	$ 370
Sales	$ 411	$ 408	$ 376
Pre-tax Operating Earnings	$ 24	$ 18	$ 39
As % of Sales	5.8%	4.4%	10.4%
Backlog	$ 283	$ 301	$ 296
Capital Expenditures	$ 15	$ 16	$ 11

1990 results include the effect of restructuring charges of $14.6. See Notes to Consolidated Financial Statements.

Flexible Factories

Flexible factories are able to respond quickly to customers' changing needs. At Varian Canada Microwave Products, operations have been reorganized so that mixed models of klystron tubes can be produced simultaneously to match customer demand. The resulting improvement in delivery times has helped Varian snatch market share from competitors.

Varian Ion Implant Systems recognized that customers want more than hardware when they purchase equipment. Since each day of operational time is worth more than $30,000, they need fast installation too. Through improved manufacturing and shipping techniques, installation times on the E-220 ion implanter have been reduced from a month or more to some ten days.



Current efforts include continuing quality improvements to help reduce costs further, and to better determine specific customer requirements through formalized market analysis. Technological efforts are increasingly driven by the customer needs that surface through this marketing process. The Company's technical expertise is also being applied to improving its manufacturing capabilities.

Outlook Sales and orders are expected to moderate further as the defense business trends downward. However, ongoing Operational Excellence efforts within Electron Devices should continue to favorably impact financial results in 1991. Increased customer focus, more flexible factories, and continued quality improvement efforts hold the potential for improved profitability, despite continuing lackluster market conditions.

SEMICONDUCTOR EQUIPMENT

Varian is among the world's largest producers of semiconductor fabrication equipment, with leadership positions in ion implantation and sputtering systems used in device fabrication in the U.S., Europe, and the Pacific Rim.

Orders and sales declined modestly from 1989, due to a general slackening in demand for semiconductor production equipment. Profitability fell significantly, however, reflecting the higher costs inherent in the early stages of producing and installing complex new systems, three of which were introduced to the marketplace in 1989. Backlog remains comparable to that of a year ago.

The Company's resale of Tokyo Electron, Ltd. (TEL) production equipment in the U.S. and Europe grew modestly in 1990. This provided an expanding source of revenue and allowed Varian to offer customers a broader line of high quality systems, coupled with its strong support network.

Overview The simultaneous introduction of multiple new systems made 1990 a challenging year for the Semiconductor Equipment business. High initial factory costs, along with increased installation and start-up expenses, eroded profit margins for much of the year, as the business moved along the learning curve toward building these intricate machines more cost effectively.

By the fourth quarter, the initial difficulties had been largely resolved, and the systems were being routinely produced and installed around the world. Quality improvement gains have combined with various new manufacturing techniques to smooth production and installation processes; inventories have been reduced;

SEMICONDUCTOR EQUIPMENT

(Dollars in Millions)	1990	1989	1988
Orders	$ 297	$ 328	$ 264
Sales	$ 298	$ 323	$ 213
Pre-tax Operating Earnings (Loss)	$ (24)	$ 25	$ 2
As % of Sales	(8.1%)	7.7%	0.9%
Backlog	$ 125	$ 125	$ 113
Capital Expenditures	$ 16	$ 6	$ 3

1990 and 1988 results include the effect of restructuring charges of $27.0 and $25.8 respectively. See Notes to Consolidated Financial Statements.

and outside supplier relationships solidified.

Program management teams are now routinely deployed to tackle process and hardware development tasks from a multifunctional perspective. This will permit future new products to move from development directly into customer facilities more quickly and efficiently. Sales and support have been reorganized to deal with major global customers as single accounts in order to address the special requirements inherent in the business.

Discontinuation of several ancillary activities has focused the efforts of the Semiconductor Equipment business on key opportunities where Varian can deliver added value to the customer. Late in the year, the Company announced a new "source," the sputtering system component that directs its deposition of metal. The Quantum source will allow customers to produce higher yield, advanced devices using either Varian's new cluster tool, the M2000, or an earlier system, the Model 3290 sputterer.

Outlook Worldwide demand for semiconductor fabrication equipment remains cyclical. It weakened in 1990, as major device manufacturers delayed plans for new production facilities because of growing recessionary fears. A turn in the cycle, when it comes, should lead to improving orders and sales. However, Varian's continuing focus on Operational Excellence and improved manufacturing efficiency will benefit this business regardless of whether it must weather a prolonged downturn or it encounters a more positive market environment.

INSTRUMENTS

Varian is a leading supplier of analytical instrumentation and related equipment used worldwide to study the chemical composition of myriad substances. Its instrument products are targeted toward specific, growing applications in environmental monitoring and analysis, biological and biochemical research, and quality control and research and development in such industries as petroleum, foods, metals processing, and pharmaceuticals.

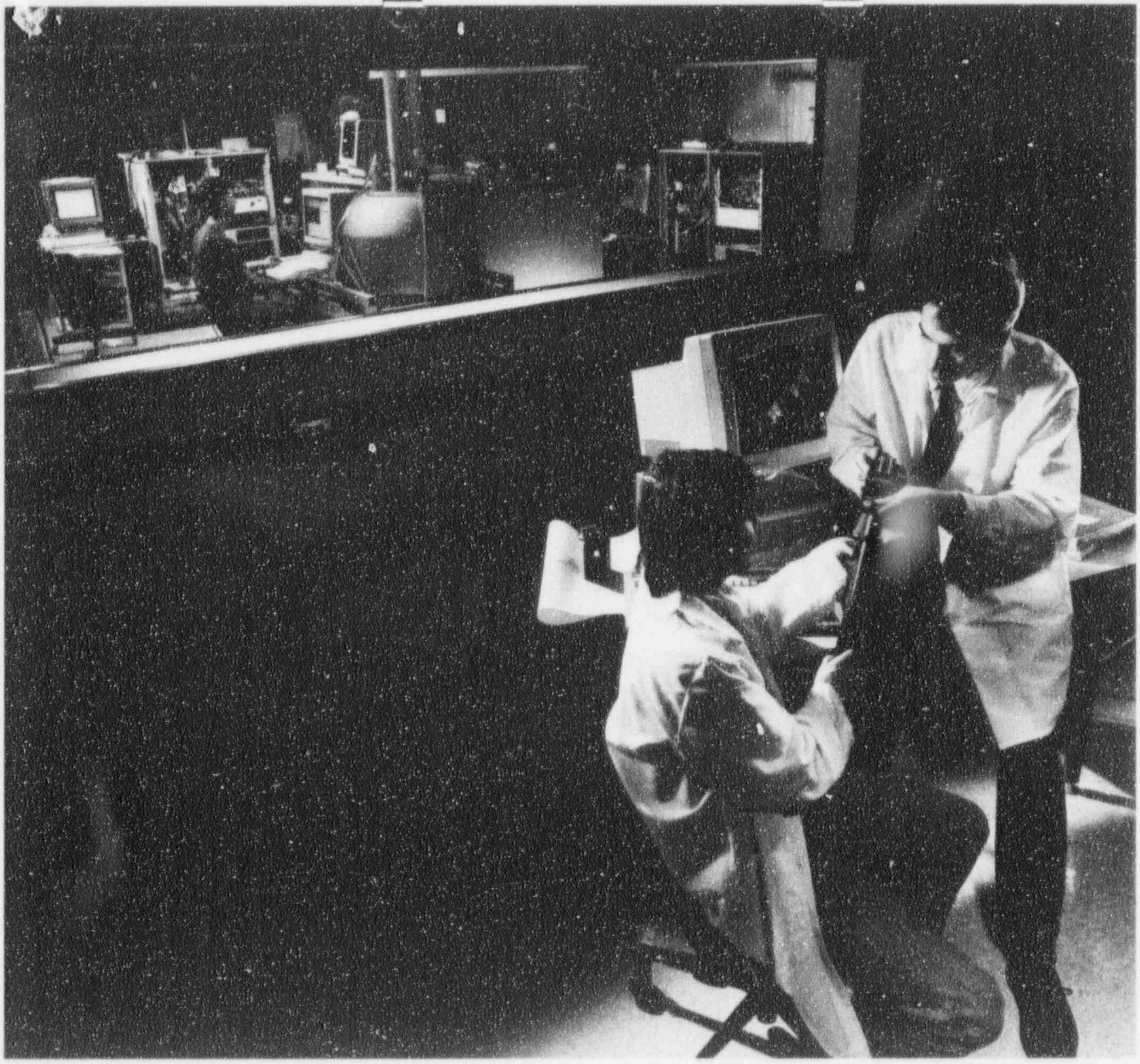
Strong international demand and the introduction of several new products contributed to a healthy increase in sales over the previous year. Before restructuring costs, profitability also rose, primarily due to manufacturing efficiencies and improved response to market demands. Orders and backlog both climbed, as well.

International orders account for over 60% of total Instruments volume. European demand was intense in all of the Company's target markets, particularly environmental and life sciences. However, U.S. volume grew only modestly.

Instruments

(Dollars in Millions)	1990	1989	1988
Orders	$ 267	$ 234	$ 219
Sales	$ 268	$ 234	$ 231
Pre-tax Operating Earnings	$ 19	$ 19	$ 20
As % of Sales	7.1%	8.1%	8.7%
Backlog	$ 60	$ 56	$ 49
Capital Expenditures	$ 9	$ 7	$ 7

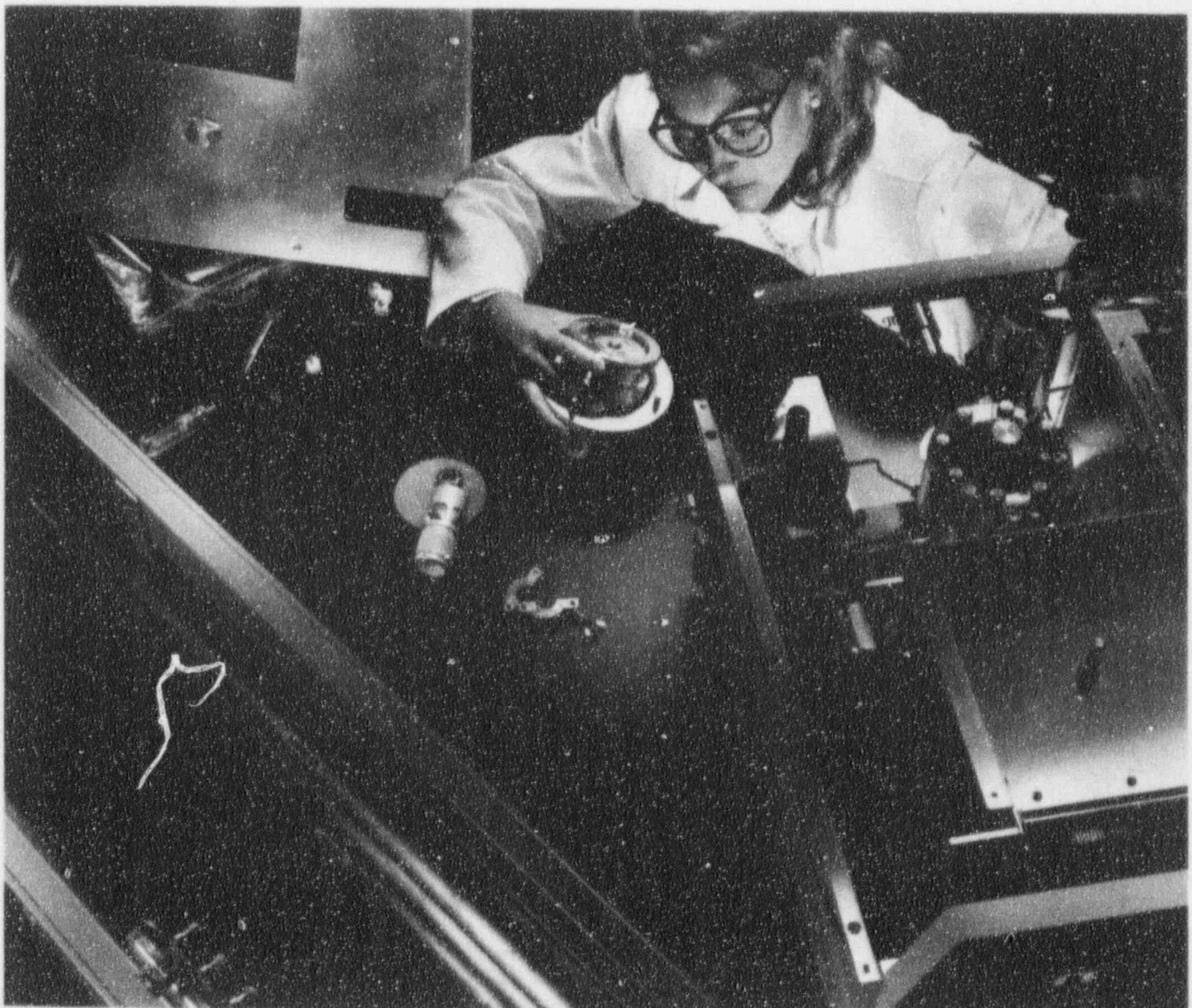
1990 and 1988 results include the effect of restructuring charges of $5.2 and $2.9 respectively. See Notes to Consolidated Financial Statements.



Time to Market

Developing and manufacturing a new product quickly and efficiently requires cooperative effort from manufacturing, engineering, and marketing. The computer integrated manufacturing system at Varian NMR Instruments allowed multiple functions to simultaneously participate in the design of a new probe, easing its transition to manufacturing, ensuring that it met customers' needs, and reducing its time to market by three months.

An unswerving commitment to quality requires careful product development and analysis. In designing the new V-60 Turbopump, Varian Vacuum Products used unique manufacturing methods to reduce the number of parts in the palm-sized pump by 50%. This makes it more efficient to manufacture and increases its reliability when installed in an analytical instrument.



Overview The Instruments business has been a leader in the Company's drive to achieve world-class operations, employing such cost- and efficiency-improvement techniques as just-in-time manufacturing and statistical process control. During the year, the flow of products through instrument factories increased, and costs related to manufacturing inefficiencies, including scrap and rework, declined.

Fiscal 1990 operating earnings reflect the clear benefits of this multiyear effort. For example, the Nuclear Magnetic Resonance (NMR) Instruments business unit has linked its design and production processes with computer integrated manufacturing. As a result, the time required to develop and produce a new probe to be used in research on viruses was reduced by over 30%.

Through various manufacturing and product development initiatives, the Sample Preparation Products business unit also shrank time to market on two new analysis tools destined for the clinical-pharmaceutical and environmental markets. Products which used to take two to three years to develop and bring to market were introduced in less than six months, strengthening Varian's reputation as a leader in sample preparation. The Optical Spectroscopy Systems business unit also reduced time to market in the design of a new line of UV-visible spectrometers which is enjoying excellent market acceptance. These instruments are used in diverse applications ranging from research and development of lasers to quality control of cosmetics.

The Chromatography Systems business unit slashed manufacturing time on several key products by as much as 70% and test times by some 45% through increased flexibility in its factory. Smoother production flow resulted in a 30% increase in manufacturing productivity. The unit was also able to reduce the amount of floor space required to produce its traditional products, thus allowing it to accommodate production of its new line of gas chromatograph/mass spectrometers without adding to the factory.

Several new instruments were introduced early in the year that target the needs of specific markets and broaden Varian's reach within them. The Saturn gas chromatograph/mass spectrometer system offers the highest sensitivity available on the market, thus meeting the demands of stringent new regulations governing environmental and other applications. The micro-imaging capability of the Company's new line of NMR spectrometers is demonstrating exciting growth potential by allowing Varian customers to analyze solid materials in addition to liquid or gaseous compounds.

Outlook Modest growth is expected in the domestic market for analytical instruments. However, international demand should demonstrate ongoing vitality, particularly in the environmental arena. With improving time to market, new advanced instruments, and more flexible, responsive factories, Instruments should experience continued revenue growth with improved profitability.

Varian is the world's premier supplier of equipment and services for treating cancer with high-energy radiation therapy. Products include medical linear accelerators, which generate the radiation, simulators for treatment planning, and ancillary equipment aimed at therapy management and enhanced precision.

Orders, sales, and profits climbed for the year, reflecting increasing demand for radiation treatment throughout the world and the Company's drive toward Operational Excellence. Several new product features which improve cancer treatment also helped spur growth.

Overview Varian continued to build on its reputation for strong customer support by providing systems that are regarded as the best in terms of reliability, quality, and advanced technology. Through focus groups and customer advisory panels, the Company worked closely with radiotherapy leaders. This ensures that new product development is closely coupled to the needs of users and directly addresses their efforts to improve cancer treatment.

Customer interchange played a significant role in proving the feasibility of and then refining a new built-in CT scanning capability for Varian's simulator. Coupled with exact positioning of the patient on the simulator, it will enhance treatment precision. This product was announced late in the year and is currently being readied for shipment.

Several new options compatible with the Clinac line of radiotherapy accelerators could dramatically improve treatment effectiveness by shaping the radiation beam to more closely match the contours of a malignant tumor. Testing and validation of these devices are under way at major cancer centers.

Varian is also playing a leading role in developing computerized systems for dynamic control of the equipment, safety verification, and departmental and hospital data management.

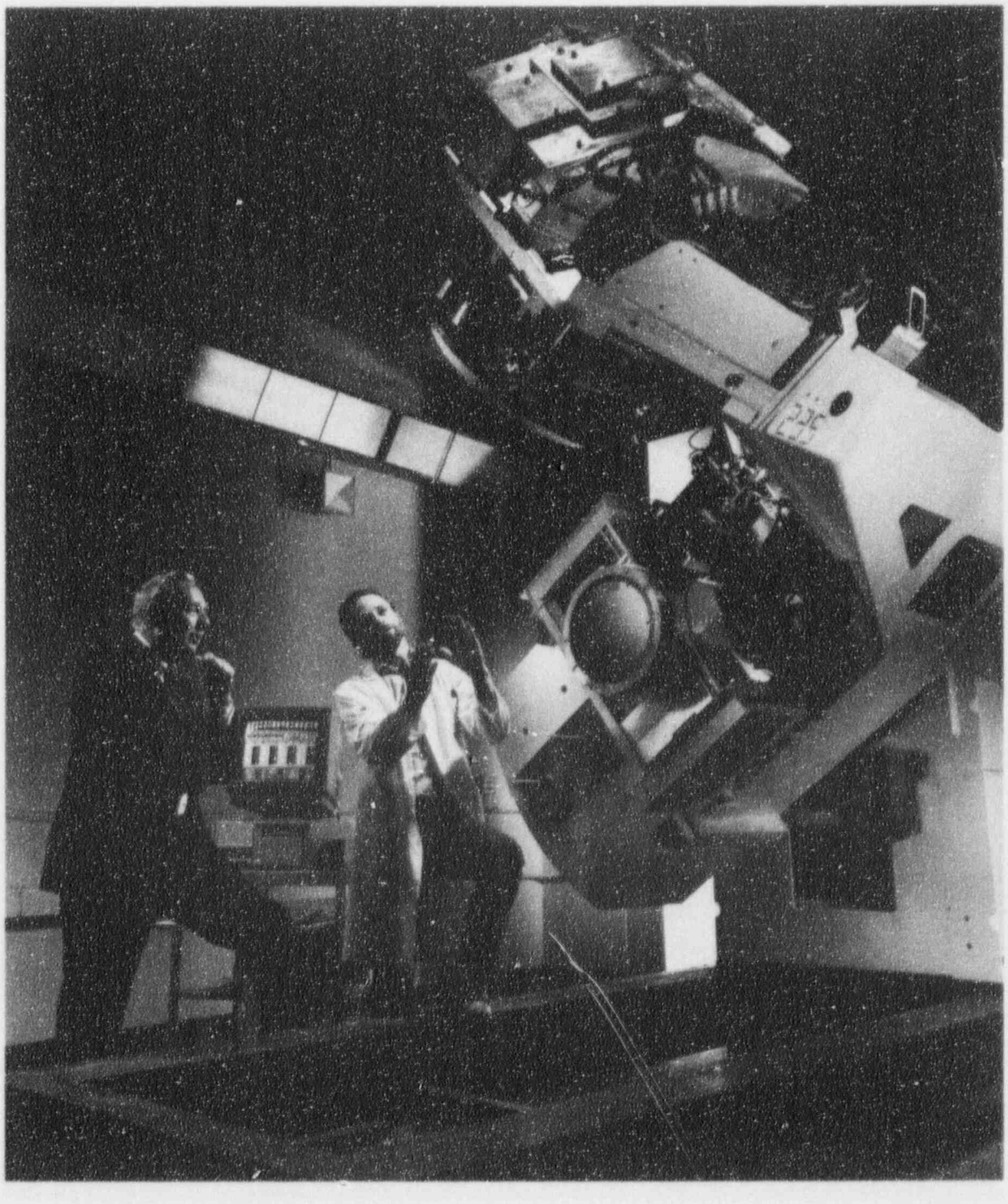
During the year, the Company received a multimillion dollar order for accelerators, simulators, and radiotherapy management systems to be installed at five treatment centers in the Soviet Union. The opening of Eastern Europe and the USSR provides a substantial, long-term growth opportunity for the Medical Equipment business. Improved health care has been cited as a major priority for these nations, and their need for therapy equipment is dramatic. While North America averages one radiation machine for every 350,000 people, the USSR and Eastern Europe have one for every eight million people.

Medical Equipment is reaping considerable

MEDICAL EQUIPMENT

(Dollars in Millions)	1990	1989	1988
Orders	$ 229	$ 208	$ 203
Sales	$ 221	$ 195	$ 168
Pre-tax Operating Earnings	$ 30	$ 28	$ 20
As % of Sales	13.6%	14.4%	11.9%
Backlog	$ 226	$ 218	$ 204
Capital Expenditures	$ 5	$ 6	$ 5

Helping employees understand customer needs, so that they can apply that knowledge to their work, is key to achieving organizational excellence. At Varian Medical Equipment, customers routinely visit the manufacturing floor, and employees hear firsthand about customer wants, hopes, and concerns. Here, a test technician shares ideas with Dr. Malcolm A. Bagshaw, Professor and Chairman of the Department of Radiation Oncology, Stanford University School of Medicine.



benefit from the quality improvement process programs which accelerated in 1990. Scrap and rework have been reduced, and shipments are predictable and consistent. Employees have been trained to inspect their own processes rather than abdicating that responsibility to a quality control function. As a result, overall quality has improved, testing times are shorter, and installation times for several systems have been reduced by 50%.

Outlook With new treatment technologies moving toward routine shipment and application, Medical Equipment should experience healthy growth. Market opportunities in newly opening geographic regions should result in higher orders and sales. Further advances in Operational Excellence will enhance this business' ability to meet customer needs and increase manufacturing efficiency, which should favorably impact profitability.

Vacuum Products

The Vacuum Products business unit manufactures components and systems that are used to attain, maintain, or measure a vacuum environment in applications ranging from semiconductor processing and analytical instrumentation to high-energy physics research.

During fiscal 1990, this business unit concentrated on returning to profitability by sizing its operations to match current business levels and then paring back its product line to focus efforts on products and markets with the greatest promise for profitable growth.

Although a slowing market resulted in reduced volume during the year, 1990 earnings, before restructuring, rebounded to a small profit from the loss of the prior year. This was achieved through work force reductions and factory consolidations, as well as continued quality improvement efforts and manufacturing efficiencies that reduced costs and led to a dramatic improvement in on-time deliveries.

With the organization more closely aligned to serve market needs and continuing efforts to achieve Operational Excellence, further earnings improvements are expected in the coming year.

FINANCIAL SUMMARY

(Dollars in millions except per share amounts)

	Fiscal Years:	1990	1989	1988	1987	1986	1985	1984	1983
SUMMARY OF OPERATIONS									
Sales	$	1,264.8	1,219.6	1,045.1	872.8	798.3	882.9	854.1	690.6
Operating Earnings (Loss)	$	32.2	69.2	45.2	23.7	(38.0)	38.5	112.9	68.0
Interest Income (Expense), Net	$	(11.5)	(9.6)	(6.3)	(4.5)	(6.3)	(3.7)	4.1	—
Other Income (Expense)	$	—	(6.1)	15.0	8.0	—	31.2	—	4.5
Earnings (Loss) from Continuing Operations before Taxes (Benefits)	$	20.7	53.5	53.9	27.2	(44.3)	66.0	117.0	72.5
Taxes (Benefits) on Earnings (Loss)	$	8.1	20.3	19.4	9.0	(27.9)	19.8	45.6	27.5
Earnings (Loss) from Continuing Operations	$	12.6	33.2	34.5	18.2	(16.4)	46.2	71.4	45.0
Earnings (Loss) from Discontinued Operations, Net of Taxes (Benefits)	$	(16.7)	(1.7)	(6.7)	3.2	1.5	(20.1)	(11.5)	(0.1)
Net Earnings (Loss)	$	(4.1)	31.5	27.8	21.4	(14.9)	26.1	59.9	44.9
Net Earnings (Loss) Per Share— Fully Diluted									
Earnings (Loss) Continuing Operations	$	0.64	1.61	1.57	0.84	(0.77)	2.10	3.24	2.15
Earnings (Loss) Discontinued Operations	$	(0.85)	(0.08)	(0.30)	0.14	0.07	(0.91)	(0.52)	(0.01)
Net Earnings (Loss) Per Share	$	(0.21)	1.53	1.27	0.98	(0.70)	1.19	2.72	2.14
Dividends Declared Per Share	$	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
FINANCIAL POSITION AT YEAR-END									
Working capital, excluding notes payable	$	270.0	282.7	267.6	258.7	231.2	245.1	298.1	271.5
Property, plant, and equipment (at cost)	$	460.4	511.2	472.6	458.6	429.0	403.6	314.5	260.1
Total assets	$	923.6	931.3	855.8	829.6	790.2	744.8	720.8	598.7
Long-term debt	$	76.8	54.9	35.2	38.1	50.8	46.2	43.0	42.3
Total debt	$	86.9	108.6	49.4	86.9	81.1	64.6	58.1	50.1
Shareholders' equity	$	400.2	427.3	451.0	438.1	410.9	429.2	426.9	362.5
Shareholders' equity per share outstanding	$	20.75	21.48	20.81	19.95	19.16	20.14	19.57	16.93
OTHER DATA									
Shares outstanding at year end (in thousands)		19,288	19,896	21,674	21,966	21,448	21,313	21,817	21,408
Employees		10,200	10,700	10,200	10,400	10,400	10,700	11,900	10,490
Shareholders		9,500	9,500	10,100	10,000	11,000	10,600	10,600	12,400
Order backlog	$	736.5	727.3	675.6	602.8	522.6	511.7	514.0	406.0
Depreciation expense	$	37.9	34.0	34.3	32.2	28.5	21.8	17.0	14.6
Return from continuing operations, net of taxes (benefits), on average equity	%	3.0	7.6	8.0	4.3	(3.9)	10.6	18.3	14.8
Total debt as a percent of total capital	%	17.8	20.3	9.9	16.6	16.5	13.1	12.0	12.1

Note: Certain amounts in prior years have been restated to reflect discontinued operations. Refer to Notes to the Consolidated Financial Statements for information regarding restructuring charges.

The selected financial data should be read in conjunction with the related consolidated financial statements and notes thereto.

Results of Operations— Net earnings from continuing operations before restructuring charges for the fiscal year ended September 28, 1990 increased 33% to $44.0 million, or $2.25 per share, compared to $33.2 million, or $1.61 per share, in fiscal 1989, and $56.9 million, or $2.59 per share, in fiscal 1988. The 1990 and 1988 results exclude aftertax restructuring charges of $31.4 million ($1.61 per share) and $22.4 million ($1.02 per share) respectively. The 1989 results include aftertax charges for anticipated legal expenses of $3.8 million, or $.18 per share, in connection with an ongoing government investigation of the power-grid tube industry. The 1988 results include an aftertax gain of $9.6 million, or $.44 per share, from the sale of Specialty Metals. Net earnings from continuing operations (inclusive of restructuring charges) for fiscal 1990 were $12.6 million, or $.64 per share, compared to $33.2 million, or $1.61 per share in fiscal 1989 and $34.5 million, or $1.57 per share in fiscal 1988. Fiscal 1990 concluded with a net loss of $4.1 million, or $.21 per share, compared to net earnings of $31.5 million, or $1.53 per share, in fiscal 1989 and $27.8 million, or $1.27 per share, in fiscal 1988. The 1990 net loss includes an aftertax charge and losses of $16.7 million, or $.85 per share, from discontinued operations. Net earnings in 1989 and 1988 include aftertax losses from discontinued operations of $1.7 million, or $.08 per share, and $6.7 million, or $.30 per share, respectively.

Total orders and sales in 1990 matched or exceeded the previous year's record levels. Fiscal 1990 orders of $1.27 billion were essentially the same as the prior year level of $1.26 billion. Sales rose 4% to $1.26 billion in fiscal 1990 from $1.22 billion in 1989 and $1.05 billion in 1988. Backlog was up slightly at $737 million for fiscal 1990 from $727 million in 1989 and $676 million for 1988.

The Instruments and Medical Equipment businesses showed significant increases in orders and sales from the prior year. Electron Devices business orders and sales changed only slightly while the Semiconductor Equipment business posted lower orders, sales, and operating earnings. Operating earnings were up for each of the other three businesses before restructuring charges.

In May 1990, Varian announced a major restructuring to improve longer term financial performance, including plans to sell a number of non-core operations and product lines peripheral to its core businesses—electron devices, analytical instruments, semiconductor equipment, and medical equipment. Concurrently, the Company also began scaling back its worldwide work force to better match its repositioned operations. This effort had resulted in the elimination of some 500 jobs by the end of the fiscal year.

Activities to be sold and treated as discontinued operations include broadcasting equipment operations in England and Texas and gallium arsenide-based units in California which make third-generation night-vision goggles and complex solid-state circuits. As of year end, Continental Electronics of Texas was sold for approximately $12 million in cash and notes for $2.9 million. A number of minor product lines are also being sold or otherwise disposed of. The operations being exited represent annual sales of about $200 million and employ about 1,600 persons. Varian expects to substantially complete the divestiture of its non-core activities within one year, and believes the reserves taken for those actions are adequate.

Operating profit for the Company's Electron Devices business rose sharply, despite flat sales in its commercial markets and a continuing gradual decline in defense sectors. Improved manufacturing, diligent cost control efforts, and other operational efficiencies contributed to the improved profits. Margins reached double-digit levels by year's end. The business intends to maintain that level of profitability in 1991, even with the likelihood that there will be further shrinkage in some of its markets.

An exceptionally strong fourth-quarter performance led to good orders and sales gains for the Instruments business. Operating profit for the year, before restructuring, rose by nearly 30%, as efforts to improve manufacturing efficiency and quality continued to pay dividends. Sales and profit gains were achieved in most product areas for this business, which has become a prototype in the Company's drive to achieve world-class operational performance.

Semiconductor Equipment orders and sales were below the prior year's levels, reflecting softer demand in the marketplace overall. This business has overcome the problems which frustrated the rollout of its new generation products in the last two years, and has now shipped a substantial number of these new systems. Recent order levels have been reasonably good, and reflect continuing demand for the Company's more established higher margin systems. Although more needs to be done to improve margins on its newer products, this business operated at a profitable level for the year before restructuring charges.

Varian's Medical Equipment business experienced double-digit percent orders and sales increases over 1989. The business benefitted from a combination of international market growth and good customer acceptance of technological advancements for its cancer therapy systems. Order backlog for these systems remains extremely strong, and the business continues to enjoy good profitability.

With the current uncertainties in the world economic environment, Varian is gearing its operations to react quickly to any signs of a significant downturn in its major markets. Phase 1 of the financial reorganization, involving consolidation and cost reduction, has gone well. Phase 2 is focused on attaining Operational Excellence in all of the core businesses. These actions hold the potential for appreciable improvement in the Company's financial performance. The prospects for realizing at least some portion of that added earnings potential in 1991 seem reasonably good, unless the world economy slides into a severe recession.

On February 28, 1990, Varian announced that its Board of Directors had elected J. Tracy O'Rourke Chairman of the Board and Chief Executive Officer. Senior operating managers now report directly to Mr. O'Rourke.

Research and development expense of $77.4 million in 1990 continued at about the same level as in the prior two years.

Net interest expense in 1990 was $11.5 million compared with net interest expense of $9.6 million in 1989 and $6.3 million in 1988. The increase in net interest expense was due to increases in the average outstanding obligations in the fiscal year.

The effective tax rate for fiscal 1990 was 39%, compared with 38% and 36% in 1989 and 1988, respectively. The increase in the tax rate from 1989 was due primarily to foreign tax credits not yet utilized. The increase in the tax rate from 1988 was due to several factors. The state effective rate increased because state tax benefits available in prior years had been fully utilized by the end of 1988. The foreign effective rate is higher as a result of certain foreign taxing jurisdictions which do not allow the benefit of tax loss carrybacks. Fiscal 1988 included a non-recurring benefit related to an inventory adjustment for discontinued operations. These increases are partially offset by an increase in the Foreign Sales Corporation (FSC) benefit for 1989 and an adjustment in 1988 related to Domestic International Sales Corporation (DISC) benefits for prior years.

In December 1987, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes (FAS 96), which the Company has not yet adopted. See Summary of Significant Accounting Policies in Notes to the Consolidated Financial Statements.

Financial Condition— The Company's financial condition remained strong after the restructuring in 1990. Cash provided from operating activities increased to $116.8 million compared with $61.3 million in the prior year. Cash used by investing activities decreased by $32.7 million compared to the prior year, mainly because there were no significant acquisitions of businesses in 1990. The combination of improved cash flow from operations and lower cash consumption by investing activities enabled the Company to reduce net debt by 44% as well as substantially complete the Company's program to purchase common stock. The reduction in debt decreased the ratio of total debt as a percent of total capital to 17.8% at the end of 1990 from 20.3% for the prior year. The ratio of current assets to current liabilities increased from 1.55 to 1 at fiscal year-end 1989 to 1.64 to 1 at year-end 1990 due in part to the classification of net assets held for sale—discontinued operations as current assets. The Company has available $100 million in unused committed lines of credit.

The management of Varian Associates, Inc. (the Company) is responsible for the integrity of the financial statements of the Company and its subsidiaries. This responsibility involves preparation of financial statements in accordance with generally accepted accounting principles and reporting data which objectively reflect the assets, liabilities, revenues, and expenses of the Company and its subsidiaries.

In accumulating and controlling its financial data, the Company establishes and maintains accounting systems designed to ensure adequate internal controls. Management believes a high level of internal control is maintained by the selection and continual training of qualified personnel, by the establishment and communication of accounting and business policies, and by internal audits. In establishing internal controls, management evaluates the cost of such systems against the benefits received. Management believes the internal control systems in use are adequate to prevent significant misuse of Company assets or misstatement of financial reports.

Coopers & Lybrand, independent accountants, are engaged to render an opinion on the consolidated financial statements. Their opinion expresses an informed judgment on whether management's financial statements, considered in their entirety, present fairly in all material respects, in conformity with generally accepted accounting principles, the Company's financial condition and operating results. It is based on procedures described in the second paragraph of their report, which include obtaining an understanding of the Company's systems and procedures and performing tests and other procedures sufficient to provide reasonable assurance that the financial statements are neither materially misleading nor contain material errors. The auditors make extensive tests of Company procedures. It is neither practical nor necessary for them to scrutinize a large portion of the Company's transactions.

The Board of Directors, through its Audit and Corporate Responsibility Committee consisting of five independent directors, is responsible for engaging the independent accountants and assuring that management fulfills its responsibilities in the preparation of the financial statements. The Audit and Corporate Responsibility Committee discusses audit and financial reporting matters with both management and Coopers & Lybrand. To ensure complete independence, Coopers & Lybrand meets with the Audit and Corporate Responsibility Committee with and without the presence of management representatives.

With the established system of internal accounting controls, internal audit, and the independent review by Coopers & Lybrand, the integrity and objectivity of the Company's financial statements are maintained.

R. A. Lemos W. Somrak

Robert A. Lemos
Vice President, Finance

Wayne P. Somrak
Controller

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands except per share amounts)

	For each of the three fiscal years in the period ended September 28, 1990		
	1990	1989	1988
Sales	$1,264,840	$1,219,604	$1,045,142
Operating Costs and Expenses			
Cost of sales	872,233	853,192	696,657
Research and development	77,402	72,650	69,786
Marketing	156,259	145,707	135,410
General and administrative	75,272	78,819	63,074
Restructuring charges	51,482	—	35,018
Total operating costs and expenses	1,232,648	1,150,368	999,945
Operating Earnings	32,192	69,236	45,197
Interest expense	(13,021)	(10,791)	(7,915)
Interest income	1,487	1,192	1,583
Other income (expense)	—	(6,100)	15,059
Earnings from Continuing Operations Before Taxes	20,658	53,537	53,924
Taxes on earnings	8,060	20,340	19,410
Earnings from Continuing Operations	12,598	33,197	34,514
Loss from Discontinued Operations Net of Tax Benefits	(16,690)	(1,678)	(6,756)
Net Earnings (Loss)	$ (4,092)	$ 31,519	$ 27,758
Earnings (Loss) Per Share—Fully Diluted			
Continuing Operations	$ 0.64	$ 1.61	$ 1.57
Discontinued Operations	(0.85)	(0.08)	(0.30)
Net Earnings (Loss) Per Share	$ (0.21)	$ 1.53	$ 1.27

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

(Dollars in thousands except par values)

	September 28, 1990	September 29, 1989
Assets		
Current Assets		
Cash and cash equivalents	$ 26,185	$ —
Accounts receivable, less allowances for doubtful accounts of $1,852 (1990) and $1,711 (1989)	256,602	263,738
Inventories	222,321	285,725
Other current assets	117,636	93,774
Net assets held for sale—discontinued operations	45,053	—
Total Current Assets	667,797	643,237
Property, Plant, and Equipment	460,412	511,213
Accumulated depreciation and amortization	(246,085)	(258,442)
Net Property, Plant, and Equipment	214,327	252,771
Other Assets	41,450	35,273
Total Assets	$ 923,574	$ 931,281
Liabilities and Shareholders' Equity		
Current Liabilities		
Notes payable	$ 10,037	$ 53,648
Accounts payable—trade	71,143	74,528
Accrued expenses	223,385	182,836
Product warranty	34,260	29,910
Advance payments from customers	69,021	73,279
Total Current Liabilities	407,846	414,201
Long-Term Debt	76,822	54,914
Deferred Taxes	38,695	34,885
Total Liabilities	523,363	504,000
Shareholders' Equity		
Preferred stock		
Authorized 1,000,000 shares, par value $1, issued none	—	—
Common stock		
Authorized 99,000,000 shares, par value $1, issued and outstanding 19,288,000 shares (1990), 19,896,000 shares (1989)	19,288	19,896
Capital in excess of par value of common stock	94,005	111,356
Retained earnings	286,918	296,029
Total Shareholders' Equity	400,211	427,281
Total Liabilities and Shareholders' Equity	$ 923,574	$ 931,281

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Dollars in thousands except per share amounts)

	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock at Cost	Total
BALANCES, OCTOBER 2, 1987	$ 21,966	$ 168,437	$ 247,713	$ —	$ 438,116
Net earnings for the year	—	—	27,758	—	27,758
Issuance of stock under employee stock purchase and option plans	392	8,256	—	—	8,648
Purchase of common stock	—	—	—	(17,840)	(17,840)
Retirement of treasury stock	(684)	(17,156)	—	17,840	—
Dividends declared ($0.26 per share)	—	—	(5,680)	—	(5,680)
BALANCES, SEPTEMBER 30, 1988	21,674	159,537	269,791	—	451,002
Net earnings for the year	—	—	31,519	—	31,519
Issuance of stock under employee stock purchase and option plans	459	10,152	—	—	10,611
Purchase of common stock	—	—	—	(60,570)	(60,570)
Retirement of treasury stock	(2,237)	(58,333)	—	60,570	—
Dividends declared ($0.26 per share)	—	—	(5,281)	—	(5,281)
BALANCES, SEPTEMBER 29, 1989	19,896	111,356	296,029	—	427,281
Net loss for the year	—	—	(4,092)	—	(4,092)
Issuance of stock under employee stock purchase and option plans	563	10,295	—	—	10,858
Purchase of common stock	—	—	—	(28,817)	(28,817)
Retirement of treasury stock	(1,171)	(27,646)	—	28,817	—
Dividends declared ($0.26 per share)	—	—	(5,019)	—	(5,019)
BALANCES, SEPTEMBER 28, 1990	$ 19,288	$ 94,005	$ 286,918	$ —	$ 400,211

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	For each of the three fiscal years in the period ended September 28, 1990		
	1990	1989	1988
Operating Activities			
Net Cash Provided by Operating Activities	$ 116,791	$ 61,290	$ 39,826
Investing Activities			
Proceeds from sale of businesses	12,000	7,043	32,500
Proceeds from sale of property, plant, and equipment	6,305	3,874	5,993
Purchase of property, plant, and equipment	(54,936)	(48,968)	(43,238)
Purchase of businesses, net of cash acquired	(1,923)	(37,385)	—
Other, net	(5,292)	(1,110)	—
Net Cash Used by Investing Activities	(43,846)	(76,546)	(4,745)
Financing Activities			
Net borrowings (payments) on short-term obligations	(42,161)	32,059	(34,607)
Proceeds from long-term borrowings	40,000	30,029	450
Principal payments on long-term debt	(19,543)	(2,892)	(3,385)
Proceeds from common stock issued to employees	10,858	10,611	8,648
Purchase of common stock	(28,817)	(60,570)	(17,840)
Dividends paid	(5,063)	(5,408)	(5,710)
Other, net	(1,019)	—	708
Net Cash Provided (Used) by Financing Activities	(45,745)	3,829	(51,736)
Effects of Exchange Rate Changes on Cash	(1,015)	(112)	257
Net Increase (Decrease) in Cash and Cash Equivalents	26,185	(11,539)	(16,398)
Cash and Cash Equivalents at Beginning of Year	—	11,539	27,937
Cash and Cash Equivalents at End of Year	$ 26,185	$ —	$ 11,539
Detail of Net Cash Provided by Operating Activities			
Net Earnings (Loss)	$ (4,092)	$ 31,519	$ 27,758
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities			
Depreciation	41,337	40,656	40,424
Deferred taxes	3,810	1,751	7,365
Undistributed earnings from affiliates less dividends received	(560)	528	(1,108)
Gain from sale of businesses	—	(3,081)	(15,059)
Loss from sale of assets	210	519	1,007
Amortization of intangibles	4,290	3,308	2,606
Abandonment of intangibles and write-off of other assets	20,965	—	15,579
Changes in assets and liabilities net of effects of acquisitions and dispositions of businesses:			
Accounts receivable	(1,528)	(5,190)	(43,876)
Inventories	27,350	(25,844)	(19,772)
Other current assets	(26,364)	(13,111)	(10,475)
Accounts payable—trade	(2,119)	14,893	(1,787)
Accrued expenses	46,477	7,021	20,891
Product warranty	4,280	5,901	372
Advance payments from customers	2,735	1,520	15,901
Net Cash Provided by Operating Activities	$ 116,791	$ 61,290	$ 39,826

See accompanying Notes to the Consolidated Financial Statements.

Summary of Significant Accounting Policies

Principles of Consolidation— The consolidated financial statements include those of Varian Associates, Inc. and its subsidiaries. Significant intercompany balances, transactions, and stock holdings have been eliminated in consolidation. Investments in less-than-majority-owned affiliated companies are stated at equity in the net assets of these companies.

Foreign Currency Translation— Assets and liabilities of subsidiaries outside the United States representing cash and amounts receivable or payable are translated into U.S. dollars at the exchange rates in effect at year end. Other accounts including inventories and property, plant, and equipment are translated at historical exchange rates. Revenue and expense items are translated at effective rates of exchange prevailing during each year, except that inventories are charged to cost of sales, and depreciation is expensed at historical exchange rates. The aggregate exchange gain (loss) included in general and administrative for 1990, 1989, and 1988 was $6.5 million, ($4.8) million, and $1.4 million, respectively.

The Company obtains forward exchange contracts in order to mitigate the effects of foreign exchange rate changes on net monetary balances and order backlog. At fiscal year-end 1990, the Company had contracts with maturities of three months or less to purchase $46.5 million in foreign currency (25.3 million pounds sterling).

Revenue Recognition— Sales and related cost of sales are recognized primarily upon shipment of products. Sales and related cost of sales under long-term contracts to commercial customers and the U.S. Government are recognized primarily as units are delivered.

The estimated sales values of performance under certain U.S. Government fixed-price and fixed-price incentive contracts in process are recognized under the percentage of completion method of accounting where the sales value is determined on the basis of physical completion and costs are expensed as incurred. Sales under cost-reimbursement contracts, primarily research and development contracts, are recorded as costs are incurred and include estimated earned fees in the proportion that costs incurred to date bear to total estimated costs. The fees under certain U.S. Government contracts may be increased or decreased in accordance with cost or performance incentive provisions which measure actual performance against established targets or other criteria. Such incentive fee awards or penalties are included in revenue at the time the amounts can be reasonably determined.

Statements of Cash Flows— The Company considers currency on hand, demand deposits, and all highly liquid investments with an original maturity of three months or less to be cash and cash equivalents. Liabilities assumed in the purchases of businesses were $4.6 million and $5.8 million in fiscal 1990 and 1989, respectively.

Inventories— Inventories are valued at the lower of cost or market (realizable value) using last-in, first-out (LIFO) cost for the U.S. inventories of the Instruments, Semiconductor Equipment, and Medical Equipment businesses. All other inventories are valued principally at average cost. Approximately half of total gross inventories are valued using the LIFO method. If the first-in, first-out (FIFO) method had been used, inventories would have been higher than reported by $54.3 million in fiscal 1990, $47.5 million in fiscal 1989, and $45.0 million in fiscal 1988. Inventories related to long-term contracts amounted to $15.9 million and $35.1 million at fiscal year-end 1990 and 1989, respectively.

These amounts are net of progress payments of \$4.5 million and \$8.8 million, respectively. Inventoried costs relating to long-term contracts are stated at actual production costs, and generally do not include start-up or general and administrative costs. Inventory balances in 1990 reflect the reclassification of discontinued operations' inventories to net assets held for sale—discontinued operations. The main components of inventories are as follows:

(Dollars in millions)	1990	1989
Raw materials and parts	\$ 113.3	\$ 140.7
Work in process	73.2	101.7
Finished goods	35.8	43.3
Total Inventories	\$ 222.3	\$ 285.7

Property, Plant, and Equipment— Property, plant, and equipment are stated at cost. Major improvements are capitalized, while maintenance and repairs are expensed currently. Plant and equipment are depreciated over their estimated useful lives using the straight-line method for financial reporting purposes and accelerated methods for tax purposes. Leasehold improvements are amortized using the straight-line method over their estimated useful lives or the length of the lease, whichever is less. Property, plant, and equipment balances in 1990 reflect the reclassification of the discontinued operations' balances to net assets held for sale—discontinued operations. The main components of property, plant, and equipment are as follows:

(Dollars in millions)	1990	1989
Land and land leaseholds	\$ 9.4	\$ 14.3
Buildings	153.4	172.3
Machinery and equipment	279.9	301.2
Construction in progress	17.7	23.4
Total Property, Plant, and Equipment	\$ 460.4	\$ 511.2

Taxes on Earnings— Deferred recoverable tax benefits of \$93.5 million at fiscal year-end 1990 and \$70.0 million at fiscal year-end 1989 are included in other current assets. These resulted principally from product warranty provisions, inventory reserves, reserves for discontinued operations, and special provisions not currently deductible for tax purposes. In addition, other current assets include refundable taxes of \$3.2 million at fiscal year-end 1990 and \$3.2 million at fiscal year-end 1989, resulting from the carryback of operating losses and credits. Deferred tax credits of \$38.7 million at fiscal year-end 1990 and \$34.9 million at fiscal year-end 1989 arose primarily from the use of accelerated depreciation methods for tax purposes and from foreign tax credits not yet utilized for financial reporting purposes.

The Company plans to continue reinvesting earnings of its non-U.S. subsidiaries to expand its international activities. Therefore, it makes no provision for additional U.S. taxes which might result from distribution of such earnings unless they are actually repatriated. In 1990, the Company repatriated \$2.5 million of earnings from a non-U.S. subsidiary, providing U.S. tax of \$1.4 million. Amounts repatriated in 1989 and 1988 were not significant. At fiscal year-end 1990, 1989, and 1988, the cumulative amount of earnings from certain subsidiaries on which the Company has not provided U.S. income taxes was approximately \$29 million, \$22 million, and \$19 million, respectively.

The Company has a Foreign Sales Corporation (FSC) to assist with its export activities. A portion of the earnings of the FSC is taxable and provision has been made for those taxes.

In December 1987, the Financial Accounting Standards Board (FASB) issued Statement No. 96, Accounting for Income Taxes (FAS 96). This statement requires a major change in the method used to account for income taxes. The statement is effective for the Company's fiscal year 1993; earlier adoption is permitted and being considered. The FASB is currently reconsidering certain relevant aspects of FAS 96. The Company is currently studying the implications of the statement, but the timing and impact of its implementation has not yet been determined.

Research and Development— Company-sponsored research and development costs related to both present and future products are expensed currently. Costs related to research and development contracts are included in inventory and charged to cost of sales upon recognition of related revenue. Total expenditures on research and development for fiscal 1990, 1989, and 1988, were $90.7 million, $86.5 million, and $77.7 million, respectively, of which $13.3 million, $13.9 million, and $7.9 million, respectively, were funded by customers.

Computation of Earnings per Share— Earnings per share computations are based on the weighted average common shares outstanding and common share equivalents (dilutive stock options). The average number of common shares and common share equivalents used in the computation of earnings per share in 1990, 1989, and 1988 was 19,538,000, 20,659,000, and 21,936,000 shares, respectively. There is no significant difference between fully diluted earnings per share and primary earnings per share.

Reclassification— Certain amounts in prior years have been reclassified to conform with the 1990 presentation.

Restructuring Charges

During 1990, the Company incurred restructuring charges aggregating $51.5 million in connection with the discontinuation of various product lines and consolidation of certain facilities. The charges consist mainly of provisions for discontinued programs and charges for business restructuring activities and termination reserves.

During 1988, the Company incurred restructuring charges of $35.0 million for a major cost reduction effort that resulted in consolidation of two divisions and the discontinuation of a product line in the Semiconductor Equipment business, as well as other actions undertaken as part of a company-wide cost reduction effort. The restructuring charges are composed mainly of asset write-offs and estimated accruals associated with move and rearrangement, continued product support, termination, and other costs.

Other Income (Expense)

In 1989, other expense of $6.1 million represents charges for anticipated legal expenses in connection with an ongoing government investigation of the power-grid tube industry. (See Contingencies Note.)

In 1988, other income of $15.0 million represents the gain on the sale of Specialty Metals. Sales for Specialty Metals amounted to $17.4 million in fiscal 1988. Proceeds from the sale were $32.5 million.

Discontinued Operations

During 1990, the Company announced plans to sell its broadcasting equipment operations in England and Texas and gallium arsenide-based units in California. These businesses are being accounted for as discontinued operations. The sale of Continental Electronics in Texas was consummated in September, 1990. The Company received $12 million in cash and notes for $2.9 million. Formal plans have been developed, and it is expected that the divestitures of the remaining operations will be completed within one year. Amounts in the consolidated statements of operations for 1989 and 1988 have been restated to conform to the 1990 discontinued operations presentation.

The estimated loss on discontinuance of the businesses was $15.2 million (net of income tax benefits of $7.3 million) consisting of an expected aftertax loss on the sale of the businesses of $7.7 million and a provision of $7.5 million for expected operating losses during the phase-out period of one year. Sales and net losses from the discontinued operations prior to the measurement date are as follows:

(Dollars in millions)	1990	1989	1988
Sales	$ 67.1	$ 132.8	$ 133.6
Loss before tax benefits	2.4	2.7	10.6
Tax benefits	.9	1.0	3.8
Loss from operations	1.5	1.7	6.8
Loss on disposal, net of tax benefits of $7.3 in 1990	15.2	—	—
Net Loss	$ 16.7	$ 1.7	$ 6.8

The net assets of the discontinued businesses held for sale have been included in the accompanying balance sheet at September 28, 1990, under the caption "Net assets held for sale—discontinued operations." This balance consists of current assets of $37.1 million, noncurrent assets of $28.1 million, and current liabilities of $20.1 million.

Receivables from Long-Term Contracts

Accounts receivable from long-term contracts were $11.8 million and $33.3 million in 1990 and 1989, respectively. U.S. Government contracts were $8.9 million and $16.9 million in 1990 and 1989, respectively. In addition, Commercial contracts were $2.9 million and $16.4 million in 1990 and 1989, respectively.

The balances billed but not paid by customers pursuant to retainage provisions were not significant at fiscal year-end 1990 and 1989. Based on the Company's experience with similar contracts in recent years, the retention balances at fiscal year-end 1990 are expected to be collected in fiscal 1991.

Recoverable costs and accrued profit not billed comprise principally amounts of revenue recognized on contracts for which billings had not been presented to the customers because the amounts were not billable at the balance sheet date. It is anticipated such unbilled amounts receivable from the U.S. Government and commercial customers at fiscal year-end 1990 will be billed and collected in fiscal 1991.

No significant amounts were subject to future negotiation at fiscal year-end 1990 and 1989.

Accrued Expenses

(Dollars in millions)	1990	1989
Taxes, including taxes on earnings	$ 26.2	$ 21.5
Payroll and employee benefits	59.5	53.7
Restructuring and discontinued businesses	43.3	15.1
Estimated loss contingencies	23.6	27.2
Other	70.8	65.3
Total Accrued Expenses	$ 223.4	$ 182.8

Short-Term Debt

Short-term notes payable and the current portion of long-term debt amounting to $10.0 million and $53.6 million at fiscal year-end 1990 and 1989, respectively, represent borrowings at weighted average interest rates of 10.0% and 9.4%, respectively. Total debt is subject to limitations included in long-term debt agreements.

At fiscal year-end 1990, the Company had total unused committed lines of credit amounting to $100 million.

Long-Term Debt

(Dollars in millions)	1990	1989
Unsecured term loan, LIBOR+½% (effectively fixed at 8.27% through December 31, 1991 through an interest rate exchange agreement), due December 31, 1992	$ 40.0	$ —
Unsecured term loan, 9.9% due in annual installments of $6.0 through 1994	24.0	30.0
Unsecured term loan, 9.5% due in annual installments of $2.5 through 1995	12.5	15.0
Mortgage loans, interest rates range from 9.5% to 9.88% payable through 2005	8.5	18.4
Other	.7	1.8
Long-term borrowings	85.7	65.2
Less current portion	8.9	10.3
Long-Term Debt	$ 76.8	$ 54.9

Each of the unsecured term loans contain covenants which limit future borrowings and require the Company to maintain certain levels of working capital and operating results. At fiscal year-end 1990, the Company was in compliance with all restrictive covenants of the loan agreements and approximately $21.6 million of retained earnings were unrestricted for payment of cash dividends. Mortgage loans are collateralized by various land and buildings.

Required principal repayments of long-term debt for fiscal years 1991 through 1995 are as follows, in millions: $8.9, $8.9, $48.9, $10.0, and $2.9.

Interest paid on short-term and long-term debt was $14.0 million in fiscal 1990, $10.4 million in fiscal 1989, and $7.9 million in fiscal 1988.

Stock Option and Purchase Plans

As of fiscal year-end 1990, the Company had reserved 2,344,000 shares of common stock for issuance to officers and key employees under stock option plans. All options under the incentive and non-qualified plans have been granted at prices equal to the fair market value of the stock on the date of grant.

Options granted on or before February 10, 1987 are exercisable commencing one year following date of grant, expire if not exercised within ten, seven, or five years from date of grant, and, based on issue date, are exercisable in cumulative installments of one-quarter, one-third, or one-half each year. Options granted on or after February 11, 1987 are exercisable in cumulative installments of one-third each year, commencing one year following date of grant, and expire if not exercised within seven years from date of grant.

Option activity under the plans is presented below:

(Dollars in millions except per share amounts, shares in thousands)	1990 Shares	1990 Dollars	1989 Shares	1989 Dollars	1988 Shares	1988 Dollars
Beginning of year	1,653	$ 44.1	1,419	$ 36.6	1,139	$ 28.7
Granted	868	18.9	439	12.8	436	12.2
Terminated or expired	(195)	(5.3)	(93)	(2.7)	(109)	(3.3)
Exercised	(91)	(2.3)	(112)	(2.6)	(47)	(1.0)
End of Year	2,235	$ 55.4	1,653	$ 44.1	1,419	$ 36.6
Shares exercisable	838		460		66	
Available shares remaining	109		782		1,127	

Options were outstanding at prices ranging from $21.19 to $36.25 per share at fiscal year-end 1990. Options were exercised at prices ranging from $23.50 to $29.25 for fiscal 1990, $12.10 to $24.19 for fiscal 1989, and $7.82 to $33.69 for fiscal 1988.

The Employee Stock Purchase Plan (ESPP) covers substantially all employees in the United States and Canada. The participants' purchase price is the lower of 85% of the closing market price on the participants' most recent enrollment date, or 85% of the closing market price on the last trading day of the fiscal quarter. The discount is treated as equivalent to the cost of issuing stock for financial reporting purposes.

During fiscal 1990, 1989, and 1988, 380,000 shares, 322,000 shares, and 314,000 shares were purchased for $7.3 million, $6.9 million, and $6.8 million, respectively. At fiscal year-end 1990, the Company had a balance of 468,000 shares reserved for the ESPP.

Preferred Stock Purchase Rights

At September 28, 1990, there were issued and outstanding 19,288,000 preferred stock purchase rights (one right for each outstanding common share). Each right entitles the holder to buy one one-hundredth of a share of the Company's Series A Junior Participating Preferred Stock for $125. Of the 1,000,000 shares of authorized preferred stock, 280,000 shares have been designated as Series A Junior Participating Preferred Stock, to be issued upon exercise of the rights. Upon issuance, these preferred shares will have certain voting, dividend, and liquidation preferences over the common stock, as described in the Rights Agreement of August 25, 1986, as amended.

The rights are exercisable ten days after a person or group has acquired 15% or more of the Company's voting stock or the tenth day (or such later date as may be determined by the Board of Directors) after the date of the commencement or announcement of a person's or group's intention to commence a tender or exchange offer whose consummation will result in the ownership of 30% or more of the stock. If a person or group becomes the beneficial owner of 15% or more of the voting stock, each right would entitle the holder, other than the acquiring person or group, to buy shares of the Company's Series A Junior Participating Preferred Stock having a market value of $250 for the exercise price of $125. If the Company were to be merged into another entity, or merge with another entity and the common stock were changed into other securities or assets, each right would entitle the holder to purchase for the exercise price of $125, common stock of the acquiring company equal to a market value of twice the exercise price, or $250.

The rights expire on August 25, 1996 but may be redeemed by the Board of Directors of the Company for $.05 per right at any time before they become exercisable.

Retirement Plans

The Company has several defined contribution retirement plans covering substantially all of its employees. Total pension expense amounted to $15.8 million for fiscal 1990, $16.4 million for fiscal 1989, and $13.5 million for fiscal 1988. The major obligation is to contribute an amount based on a percentage of each participants' base pay. The Company also contributes 5% of its consolidated earnings from continuing operations before taxes, as adjusted for discretionary items, as retirement plan profit sharing. Participants are entitled, upon termination or retirement, to their portion of the retirement fund assets, which are held by a third-party trustee.

A number of the Company's foreign subsidiaries have defined benefit retirement plans for regular full-time employees. The Company adopted the provisions of Statement of Financial Accounting Standards No. 87, "Employer's Accounting for Pensions," for its foreign retirement plans effective with fiscal 1990. The 1990 pension amount includes the income effect of the adoption which was not material to the Company's consolidated financial statements.

U.S. federal income tax returns for the years through 1980 have been settled with the Internal Revenue Service. It is believed that adequate provision has been made for all open years and unresolved issues. The detail of taxes (benefits) on earnings (loss) is as follows:

(Dollars in millions)	1990	1989	1988
Current			
U.S. federal	$ 9.5	$ 11.0	$ 5.3
Non-U.S.	8.7	7.9	10.0
State and local	1.3	4.3	1.7
Total current	19.5	23.2	17.0
Deferred			
U.S. federal	(19.3)	(4.1)	(0.3)
Non-U.S.	(0.3)	0.2	(1.1)
Total deferred	(19.6)	(3.9)	(1.4)
Taxes (Benefits) on Earnings (Loss)	$ (0.1)	$ 19.3	$ 15.6

Deferred taxes on earnings result from timing differences between income reported in the financial statements and taxable income. The tax effects of thes: differences are as follows:

(Dollars in millions)	1990	1989	1988
Inventory adjustments	$ (5.7)	$ (1.5)	$ 3.4
Changes in provisions for discontinued operations	(12.7)	(0.8)	(2.9)
Product warranty	(1.5)	(1.8)	(0.3)
Deferred income	(0.3)	(0.5)	0.3
Accelerated depreciation	—	2.8	5.9
Installment sales	—	—	(5.7)
Other	0.6	(2.1)	(2.1)
Total Deferred	$ (19.6)	$ (3.9)	$ (1.4)

The reconciliation between the effective tax rates on continuing operations and the statutory federal income tax rates is shown in the following schedule:

	1990	1989	1988
Statutory federal income tax rate	34.0%	34.0%	34.0%
State and local taxes, net of federal tax benefit	6.2	5.6	2.5
Net investment tax credit recapture	0.5	0.4	0.6
Foreign income deemed permanently invested, net of foreign tax credits utilized and foreign taxes	4.3	2.0	0.5
FSC/DISC	(5.5)	(3.0)	1.4
Inv[illegible]ry adjustment on discontinued operations	—	—	(1.8)
Charitable contributions	—	(0.6)	(0.9)
Other	(0.5)	(0.4)	(0.3)
Effective Tax Rate	39.0%	38.0%	36.0%

Income taxes paid (refunded) [illegible] as follows:

(Dollars in millions)	1990	1989	1988
Federal income taxes paid	$ 6.9	$ 12.7	$ 1.6
Federal income taxes refunded from prior years	—	(0.5)	(5.3)
State income taxes paid, net	3.9	5.0	1.3
Foreign income taxes paid, net	4.3	11.1	7.1
Total Paid	$ 15.1	$ 28.3	$ 4.7

The amounts refunded in 1989 and 1988 are the result of Net Operating Loss and General Business Tax Credit carrybacks from 1987 to 1984 and from 1986 to 1983 and 1984, respectively.

Lease Commitments

At fiscal year-end 1990, the Company was committed to minimum rentals under noncancellable operating leases for fiscal years 1991 through 1995 and thereafter as follows, in millions: $14.2, $11.3, $8.5, $5.2, $2.9, and $4.5. Rental expense for fiscal years 1990, 1989, and 1988 was $33.8, $32.9, and $34.0, respectively.

Contingencies

On September 21, 1988, Rodney Shields, who purports to be a stockholder of the Company, filed a stockholder's derivative action in the Superior Court of the State of California, County of Santa Clara. The complaint alleges that the Company obtained certain defense contracts by illegal means and overcharged the government in connection with other defense contracts. Mr. Shields further alleged that certain named individuals, including 17 present or former directors and officers of the Company, breached their fiduciary duties and violated various provisions of the California Business and Professions Code. On June 26, 1989, the court dismissed the complaint with leave to amend due to Mr. Shields' failure to make a pre-litigation demand on the Company's Board of Directors. On July 26, 1989, Mr. Shields amended his complaint, and on February 21, 1990, the court dismissed the amended complaint with leave to amend due to Mr. Shields' continued failure to make a demand.

On April 9, 1990, Mr. Shields demanded that the Company institute legal proceedings against the individuals allegedly responsible for the conduct described in Mr. Shields' amended complaint. On May 11, 1990, the Board of Directors of the Company determined that the commencement of the litigation sought by Mr. Shields would not serve the best interests of the Company. On September 24, 1990, the plaintiff filed a second amended complaint, alleging that Varian's Board of Directors wrongfully refused the plaintiff's demand that the Board cause the Company to commence legal action against the defendants named in the plaintiff's prior complaints. The Company and the defendant officers and directors filed a motion to dismiss the second amended complaint.

In addition to the above, the grand jury sitting in connection with the U.S. Department of Justice antitrust investigation of the power-grid tube industry which issued subpoenas to the Company and a number of its employees in August 1989, expired in June 1990 with no indictments returned. The Company has been informed that the investigation is continuing.

In February 1990, a civil action was brought by Panache Broadcasting of Pennsylvania, Inc. against the Company and a joint venture partner alleging that the activities of their joint venture in the power-grid tube industry violate antitrust laws. The complaint seeks injunctive relief and unspecified damages which may be trebled under the antitrust laws. The action, which was filed in the U.S. District Court in Philadelphia, has been transferred to the U.S. District Court in Chicago. Discovery has not yet taken place with respect to the Company. The Company believes that it has meritorious defenses to the Panache action and actions that could result from the Department of Justice investigation.

In addition to the above-referenced matters, the Company is presently a defendant in a number of legal actions and could incur an uninsured liability in one or more of them. In the opinion of management, the outcome of such litigation will not have a material adverse effect on the financial condition of the Company.

The Company is involved in various stages of investigation and cleanup relative to environmental protection matters, some of which relate to past disposal practices. Some of these matters are being overseen by state or federal agencies. Management believes that the final disposition of these matters will not have a material adverse effect on the financial condition of the Company.

Business Segments

Prior year industry segment data has been restated to conform with the current year presentation of continuing operations. The four industry segments are: Electron Devices business, Instruments business, Semiconductor Equipment business, and the Medical Equipment business. Indirect and common costs have been allocated through the use of estimates. Accordingly, the information is provided for purposes of achieving an understanding of operations, but may not be indicative of the financial results of the reported segments were they independent organizations. In addition, comparisons of the Company's operations to similar operations of other companies may not be meaningful.

The Electron Devices business includes a broad line of electron devices used in broadcasting, communications, and other commercial and military applications. The Instruments business consists of analytical instruments widely used in the fields of chemistry, physics, biology, life sciences, and metallurgy. The Semiconductor Equipment business includes equipment used for semiconductor wafer fabrication. The Medical Equipment business includes linear accelerators used for cancer therapy and industrial testing and inspection. Included in Eliminations and Other are certain insignificant support operations and the Vacuum Products operation.

The Company operates various manufacturing and marketing operations outside the United States. Geographic segment information is based on the location of the operation furnishing goods and services. No single country outside the United States accounts for more than 10% of total sales or total assets. Sales between geographic areas are accounted for at cost plus prevailing markups arrived at through negotiations between independent profit centers. Related profits are eliminated in consolidation.

Included in the total of United States sales are export sales of $203 million in fiscal 1990, $210 million in fiscal 1989, and $166 million in fiscal 1988. Sales under prime contracts from the U.S. Government were approximately $90 million in fiscal 1990, $111 million in fiscal 1989, and $119 million in fiscal 1988.

Industry Segment

(Dollars in millions)

	Sales			Pre-Tax Operating Earnings (Loss)			Identifiable Assets			Capital Expenditures			Depreciation		
	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988
Electron Devices	$ 411	$ 408	$ 376	$ 24	$ 18	$ 39	$ 258	$ 260	$ 246	$ 15	$ 16	$ 11	$ 14	$ 12	$ 13
Instruments	268	234	231	19	19	20	148	132	125	9	7	7	6	5	5
Semiconductor Equipment	298	323	213	(24)	25	2	157	178	108	16	6	3	7	6	6
Medical Equipment	221	195	168	30	28	20	100	90	83	5	6	5	3	2	2
Eliminations & Other	67	60	57	(7)	(10)	(13)	64	61	69	5	7	5	5	5	4
Total Industry Segments	1,265	1,220	1,045	42	80	68	727	721	631	50	42	31	35	30	30
General Corporate	—	—	—	(9)	(16)	(8)	151	102	115	3	6	4	3	4	4
Interest, Net	—	—	—	(12)	(10)	(6)	—	—	—	—	—	—	—	—	—
Continuing Operations	$1,265	$1,220	$1,045	$ 21	$ 54	$ 54	$ 878	$ 823	$ 746	$ 53	$ 48	$ 35	$ 38	$ 34	$ 34

1990 results include a restructuring charge of $51.5 million for expenses related to the phasing out of certain product lines and other related expenses including employee terminations, facility consolidations, and asset revaluations. The restructuring charges for 1990 are allocated as follows:

Electron Devices	*$ 14.6*
Instruments	*5.2*
Semiconductor Equipment	*27.0*
Other	*3.3*
General Corporate	*1.4*
	$ 51.5

1989 results include General Corporate charges for anticipated legal expenses of $6.1 million in connection with an ongoing government investigation of the power-grid tube industry.

1988 results include a gain in Semiconductor Equipment on the sale of Specialty Metals of $15.0 million and restructuring charges of $35.0 million. The restructuring charges for 1988 are allocated as follows:

Instruments	*$ 2.9*
Semiconductor Equipment	*25.8*
General Corporate	*6.3*
	$ 35.0

Geographic Segments

(Dollars in millions)

	Sales to Unaffiliated Customers			Intergeographic Sales to Affiliates			Total Sales			Pre-Tax Operating Earnings (Loss)			Identifiable Assets		
	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988
United States	$ 883	$ 883	$ 744	$194	$ 158	$ 136	$1,077	$1,041	$ 880	$ 31	$ 78	$ 61	$484	$507	$418
International	322	283	253	41	35	51	363	318	304	18	12	20	179	153	144
Eliminations & Other	60	54	48	(235)	(193)	(187)	(175)	(139)	(139)	(7)	(10)	(13)	64	61	69
Total Geographic Segments	1,265	1,220	1,045	—	—	—	1,265	1,220	1,045	42	80	68	727	721	631
General Corporate	—	—	—	—	—	—	—	—	—	(9)	(16)	(8)	151	102	115
Interest, Net	—	—	—	—	—	—	—	—	—	(12)	(10)	(6)	—	—	—
Continuing Operations	$1,265	$1,220	$1,045	$ —	$ —	$ —	$1,265	$1,220	$1,045	$ 21	$ 54	$ 54	$878	$823	$746

1990 results include a restructuring charge of $51.5 million for expenses related to the phasing out of certain product lines, and other related expenses including employee terminations, facility consolidations, and asset revaluations.

1989 results include General Corporate charges for anticipated legal expenses of $6.1 million in connection with an ongoing government investigation of the power-grid tube industry.

1988 results include restructuring charges of $35.0 million and the gain on the sale of Specialty Metals of $15.0 million.

QUARTERLY FINANCIAL DATA (UNAUDITED)

(Dollars in millions except per share amounts)

	1990					1989				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
Sales	$ 285.4	301.3	344.6	333.5	1,264.8	$ 257.4	329.9	305.2	327.1	1,219.6
Gross Profit	$ 90.5	93.5	102.2	106.3	392.5	$ 85.5	98.5	93.2	89.2	366.4
Net Earnings (Loss)										
Continuing Operations	$ 8.2	8.7	(18.9)	14.6	12.6	$ 10.1	12.4	9.0	1.6	33.2
Discontinued Operations	(0.6)	(0.9)	(15.2)	0.0	(16.7)	(0.8)	(0.4)	0.1	(0.6)	(1.7)
Net Earnings (Loss)	$ 7.6	7.8	(34.1)	14.6	(4.1)	$ 9.3	12.0	9.1	1.0	31.5
Net Earnings (Loss) Per Share—Fully Diluted										
Continuing Operations	$ 0.42	0.45	(0.98)	0.75	0.64	$ 0.48	0.60	0.44	0.08	1.61
Discontinued Operations	(0.03)	(0.05)	(0.78)	0.00	(0.85)	(0.04)	(0.02)	0.01	(0.03)	(0.08)
Net Earnings (Loss) Per Share	$ 0.39	0.40	(1.76)	0.75	(0.21)	$ 0.44	0.58	0.45	0.05	1.53

Notes: Included in the 1990 results from operations is a third quarter aftertax restructuring charge of $31.9 million for expenses related to the phasing out of certain product lines and other related expenses including employee terminations, facility consolidations, and asset revaluations. The aftertax charge for third quarter 1990 discontinued operations of $15.2 million ($.78 per share) was due to discontinuance of several non-core businesses, predominantly in the Electron Devices business. Prior period financial data has been restated.

Included in the fourth quarter 1989 results are aftertax charges for anticipated legal expenses of $3.8 million in connection with an ongoing government investigation of the power-grid tube industry.

The four quarters for net earnings (loss) per share may not add for the year because of the different number of shares outstanding during the year.

COMMON STOCK PRICES (UNAUDITED)

	1990				1989			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Common Stock								
High	$ 25⅞	26¼	29⅛	34¼	$ 30¼	30⅜	28⅜	28⅜
Low	$ 19⅞	20	23⅜	27⅞	$ 25½	25¼	23½	23½
Dividends Declared Per Share	$ .065	.065	.065	.065	$ .065	.065	.065	.065

To the Board of Directors and Shareholders of Varian Associates, Inc.

We have audited the accompanying consolidated balance sheets of Varian Associates, Inc. and subsidiary companies as of September 28, 1990 and September 29, 1989, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three fiscal years in the period ended September 28, 1990. 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Varian Associates, Inc. and subsidiary companies as of September 28, 1990 and September 29, 1989, and the consolidated results of their operations and their cash flows for each of the three fiscal years in the period ended September 28, 1990 in conformity with generally accepted accounting principles.

Coopers + Lybrand

COOPERS & LYBRAND

San Jose, California
October 19, 1990

Business Units, Locations	*Principal Products*	*Applications*
ELECTRON DEVICES		
Microwave Power Tube Products Palo Alto, Calif.	Klystrons, gyrotrons	Radar, communications, electronic countermeasures, energy research, medical equipment
Traveling-Wave Tube Products Palo Alto, Calif.	Traveling-wave tubes	Communications, electronic countermeasures, radar
Coupled Cavity Tube Products Palo Alto, Calif.	Coupled cavity tubes	Radar, electronic countermeasures, communications
Crossed Field & Receiver Protector Products Beverly, Mass.	Magnetrons, crossed-field amplifiers, ring-loop traveling-wave tubes, receiver protectors, transmitters, modulators, radar subsystems	Radar, electronic countermeasures, communications
Power-Grid & X-ray Tube Products San Carlos, Calif.; Salt Lake City, Utah	Power-grid tubes and ancillary hardware, X-ray subsystems, cavity amplifiers, oscillators, X-ray tubes, Klystrode tubes	Communications, radar, industrial, diagnostic X-ray
Canada Microwave Products Georgetown, Ontario	Power supplies, klystrons, traveling-wave tubes, millimeter-wave tubes	Communications, radar, diagnostic X-ray, industrial
Microwave Equipment Products Santa Clara, Calif.	Power amplifiers and transmitters, power supplies	Satellite communications, radar, electronic countermeasures, scientific, instrumentation
SEMICONDUCTOR EQUIPMENT		
Ion Implant Systems Gloucester, Mass.	Ion implantation equipment	Semiconductor wafer fabrication
Thin Film Systems Palo Alto, Calif.	Integrated processing systems, sputtering systems	Semiconductor wafer fabrication
Varian-TEL Products Fremont, Calif.	Sale and distribution of Tokyo Electron, Ltd. products in the U.S. and Europe.	Semiconductor wafer fabrication
INSTRUMENTS		
Nuclear Magnetic Resonance Instruments Palo Alto, Calif.	Nuclear magnetic resonance (NMR) spectrometers	Chemical analysis and research, life science
Chromatography Systems Walnut Creek and Sunnyvale, Calif.	Gas and liquid chromatographs, data systems, gas chromatograph/mass spectrometer systems	Chemical analysis, industrial hygiene, pollution monitoring, pharmaceutical analysis
Sample Preparation Products Harbor City, Calif.	Disposable tools for preparing samples	Chemical analysis, pharmaceutical analysis, detection of drugs of abuse
Optical Spectroscopy Instruments Melbourne, Australia	Atomic absorption and UV-Vis spectrometers	Metallurgy, agriculture, pharmaceuticals, diagnostic medical testing, pollution monitoring

Business Units, Locations	Principal Products	Applications
MEDICAL EQUIPMENT		
Palo Alto, Calif.; Crawley, England	Medical and industrial linear accelerators, cancer therapy planning simulators	Radiation cancer therapy, radiographic inspection
OTHER OPERATIONS		
Vacuum Products Lexington, Mass.; Turin, Italy	High and ultra-high vacuum pumps, instrumentation, gauges, and components	Semiconductor manufacturing, instrumentation, industrial processing, high-energy physics, electron devices
Tempe Electronics Center Tempe, Arizona	Printed circuit board assembly	Varian product lines, other manufacturers' product lines
Varian Research Center Palo Alto, Calif.	Intermediate and longer term research	Present and potential product lines
AFFILIATED COMPANIES (PARTIAL LIST)		
TEL-Varian, Ltd. Nirasaki, Japan	Semiconductor manufacturing equipment	Semiconductor wafer fabrication
Spectroscopy Imaging Systems Corporation Fremont, Calif.	Nuclear magnetic resonance (NMR) imaging spectrometers	Chemical analysis and research, life science
VASCO La Fox, Illinois	Sale and distribution of electron tubes	
Varian Korea, Ltd. Seoul and Ansan City, Korea	Semiconductor manufacturing equipment	Semiconductor wafer fabrication
Varian-TEL, Ltd. Santa Clara, Calif.	Semiconductor manufacturing equipment	Semiconductor wafer fabrication

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Executive Vice President

Al D. Wilunowski
Executive Vice President

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Stanley Z. Cole
Vice President

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Vice President, Government Relations

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Vice President, Human Resources

Alvin J. Ferreira
Vice President, Operations

Allen K. Jones
Treasurer

Robert A. Lemos
Vice President, Finance and Chief Financial Officer

William R. Moore
Secretary and Associate General Counsel

Joseph B. Phair
Vice President, General Counsel

Gary E. Simpson
Vice President, Marketing

Wayne P. Somrak
Controller

Richard H. Thompson
Vice President, International

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H. Myrl Stearns[1,3]
Co-Founder and former President, Varian Associates, Inc.

Directors Emeriti
Clifford V. Heimbucher
Edwin E. Huddleson, Jr.
Richard M. Leonard
Jack A. McCullough

1 Executive Committee
2 Management Executive Committee
3 Audit and Corporate Responsibility Committee
4 Finance Committee
5 Organization and Compensation Committee
6 Nominating Committee
7 Technology and Environmental Committee

SHAREHOLDER INFORMATION

Corporate Offices

Varian Associates, Inc.
3100 Hansen Way
Palo Alto, California 94304-1030
415/493-4000

Shareholder Relations

Copies of Varian's Form 10K report filed with the Securities and Exchange Commission and other current financial information are available without charge by contacting Allen Jones, Treasurer; Varian Associates, Inc.; 3100 Hansen Way; Palo Alto, California 94304-1030. Telephone 415/424-5369.

Listings

Varian's common stock is listed on the New York and Pacific Stock Exchanges. The symbol is VAR.

Transfer Agent and Registrar

The First National Bank of Boston
P.O. Box 644
Boston, Massachusetts 02102-0644

Dividend Reinvestment and Cash Stock Purchase Plan

The Company offers its shareholders a Dividend Reinvestment and Cash Stock Purchase Plan administered by The First National Bank of Boston. Information regarding the Plan is available by writing The First National Bank of Boston Dividend Reinvestment and Cash Stock Purchase Plan, P.O. Box 1681, Boston, Massachusetts 02105.

Shareholders' Meeting

The annual meeting of shareholders will be held at the Hyatt Palo Alto, 4290 El Camino Real, February 21, 1991 at 1:30 p.m.

Varian Associates, Inc.
3100 Hansen Way
Palo Alto, California 94304-1030

varian

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended September 28, 1990 Commission File No. 1-7598

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

For the fiscal year ended September 28, 1990

[ ] 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 ________________

VARIAN ASSOCIATES, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	94-2359345
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

3100 Hansen Way, Palo Alto, California 94304-1030
(Address of principal executive offices)

(415) 493-4000
(Registrant's telephone number)

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

Title of each class	Name of each exchange on which registered
COMMON STOCK, $1.00 PAR VALUE	NEW YORK STOCK EXCHANGE PACIFIC STOCK EXCHANGE

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

None

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

YES X NO ____

	As of October 26, 1990
Aggregate market value of the voting stock held by non-affiliates of the registrant:	$518,340,000
Number of shares of common stock, par value $1, outstanding:	18,763,000

An index of exhibits filed with this Form 10-K is located on page 47.

Documents Incorporated by Reference:
Varian Associates, Inc. notice of annual meeting of shareholders and proxy statement — Part III

VARIAN ASSOCIATES, INC.

1990 FORM 10-K ANNUAL REPORT
Table of Contents

PART I

Item 1. Business

Varian Associates, Inc. together with its subsidiaries (hereinafter referred to as the "Company") is a high-technology enterprise which was founded in 1948. It is engaged in the research, development, manufacture, and marketing of products and services for the fields of communications, health care, industrial production, scientific and industrial research, defense, and environmental monitoring. The Company's principal products are electron devices, analytical instruments, semiconductor production equipment, and medical equipment. Its foreign subsidiaries engage in some of the aforementioned businesses and market the Company's products outside the United States. As of September 28, 1990, the Company employed approximately 10,200 people worldwide.

The Company sells its products throughout the world and has 50 field sales offices in the U.S. and 60 offices in other countries. In general, its markets are quite competitive, characterized by the application of advanced technology and by the development of new products and applications. Many of the Company's competitors are large, well-known manufacturers, and no reliable information is generally available on their sales of similar products.

There were no material changes in the kinds of products produced or in the methods of distribution since the beginning of the fiscal year other than discontinued operations as described in the notes to the consolidated financial statements. The Company anticipates adequate availability of raw materials.

The Company's sales to customers outside of the United States for 1990 were $502 million. The profitability of such sales is subject to greater fluctuation than U.S. sales because of generally higher marketing costs and changes in the relative value of currencies. Additional information concerning the method of accounting for the Company's foreign currency translation is set forth in the notes to the consolidated financial statements.

Varian's operations are grouped into four segments. These segments, their products, and the markets they serve are described in the following paragraphs.

The Company's Electron Devices business holds world leadership positions in microwave, power grid, special-purpose electron tubes, and power amplifiers used in satellite communications, radar, radio and television broadcasting, and other communications applications, as well as electronic countermeasures, medical diagnostics, and instrumentation. Approximately one-third of the segment's sales are for defense applications, including electronic countermeasures, radar, and missile guidance. About one-third of its sales are for communication applications, including radio and television broadcasting and satellite communications. Industrial and medical markets, such as X-ray generation and imaging, are also served.

Item 1. (continued)

Replacements and spares represent over one-half of the tube sales, particularly those used for communications, defense, and medical applications. Backlog for this segment amounted to $283 million and $301 million in fiscal 1990 and 1989, respectively.

The Company's Semiconductor Equipment business manufactures processing systems which are essential to making integrated circuits. A world leader in the development, manufacture, and application of ion implantation and sputter-coating systems, Varian equipments are operating 24 hours a day in every wafer fabrication facility in the world, and its latest models are being used to develop tomorrow's state-of-the-art devices. Backlog for this business amounted to $125 million in both fiscal 1990 and 1989.

The Instruments business manufactures, sells and services a variety of scientific instruments for analyzing chemical substances including metals, inorganic materials, organic compounds, polymers, natural substances, and biochemicals. The products include liquid and gas chromatographs, NMR spectrometers, ultraviolet visible and atomic absorption spectrometers, and small, disposable tools used to prepare chemical samples for analysis. Typical applications are biochemical and organic chemical research, measurement of the chemical composition of mixtures, studies of the chemical structure of pure compounds, quality control of manufactured materials, chemical analysis of natural products, and environmental monitoring and measurement. The major markets served are the pharmaceutical and chemical industries, chemical and life science academic research, government laboratories and specific areas of the health care industry. Large growing areas for the use of the Company's analytical instruments are environmental monitoring and life science applications in industry, government, and academic institutions. Backlog for this business amounted to $60 million and $56 million in fiscal 1990 and 1989, respectively.

The Medical Equipment business manufactures and markets linear accelerators, cancer treatment planning systems, and data management systems for radiotherapy centers. Linear accelerators are used in cancer therapy and for industrial radiographic applications. The Company's leading CLINAC® series of medical linear accelerators, marketed to hospitals and clinics worldwide, generates therapeutic x-rays and electron beams for cancer treatment. LINATRON® linear accelerators are used in industrial applications to X-ray heavy metallic structures for quality control. Backlog for the Medical Equipment business amounted to $226 million and $218 million in fiscal 1990 and 1989, respectively.

Included in Eliminations and Other are certain insignificant support operations and the Vacuum Products operation.

Item 1. (continued)

Additional information regarding the Company's lines of business and international operations is set forth in the notes to the consolidated financial statements.

The Company maintains in-house patent attorneys, holds numerous United States and non-U.S. patents, and has many United States and non-U.S. patent applications pending. The Company considers the development of patents through creative research and the maintenance of an active patent program to be advantageous in the conduct of its business, but does not regard the holding of patents as essential to its operations. The Company grants licenses to reliable manufacturers on various terms and conditions. At present, the Company participates in a number of cross-licensing arrangements with other parties. Information regarding the Company's research and development costs is contained in the notes to the consolidated financial statements.

The Company's manufacturing operations are subject to the various federal, state, and local laws restricting the discharge of materials in the environment. The Company is not involved in any pending or threatened proceedings which would require curtailment of its operations because of such regulations. The Company's capital expenditures for environmental control facilities were not material in fiscal 1990, and are not anticipated to be material in succeeding fiscal years.

Item 2. Properties

The Company's executive offices and principal research and manufacturing facilities are located in Palo Alto, California, on 71 acres of land held under leaseholds which expire in the years 2012 through 2058. These buildings owned by the Company are situated on the Palo Alto site, and provide floor space totaling 1,160,000 square feet. The following is a summary of the Company's properties at September 28, 1990:

	Land (Acres)		Buildings (000's Sq. Ft.)	
	Owned	Leased	Owned	Leased
United States	147	132	2,491	879
International	43	6	397	384
	190	138	2,888	1,263

Utilization of facilities by segment is shown in the following table:

	Buildings (000's Sq. Ft.)				
	Manufacturing, Administrative and Research & Development				
	U.S.	Non-U.S.	Total	Mktg. & Svc.	Total
Electron Devices	1,302	116	1,418	67	1,485
Instruments	285	118	403	269	672
Semiconductor Equipment	517	23	540	105	645
Medical Equipment	192	47	239	128	367
Other Operations	250	86	336	22	358
Total Operations	2,546	390	2,936	591	3,527
Other					624
Total					4,151

Other Operations includes manufacturing support and the Vacuum Products operations.

The capacity of these facilities is sufficient to meet current demand. The Company owns substantially all of the machinery and equipment in use in its plants. It is the Company's policy to maintain its plants and equipment in excellent repair and at a high level of efficiency.

Item 2. (continued)

Manufacturing sites by geographical location are as follows:

Electron Devices	California, Massachusetts, Utah, Canada
Semiconductor Equipment	California, Massachusetts, Japan, Korea
Instruments	California, Australia
Medical Equipment	California, England
Other	Arizona, California, Massachusetts, Italy

Company-owned and staffed sales offices throughout the world are located in NORTH and SOUTH AMERICA: Brazil, Canada, Mexico, United States; EUROPE: Austria, Belgium, Denmark, France, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, Germany; and PACIFIC BASIN: Australia, People's Republic of China, Hong Kong, India, Japan, South Korea, Singapore.

See the Long-Term Debt note contained in the notes to the consolidated financial statements for encumbrances on property.

Item 3. Legal Proceedings

Information required by this item is included in the "Contingencies" note to the consolidated financial statements. See page 35 of this document.

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

None

PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters

The quarterly financial data table in the notes to the consolidated financial statements located on page 40 sets forth the high and low sales price of the Company's common stock on the New York Stock Exchange Composite Index (trading symbol VAR) for the last two years. The common stock of the Company is listed on the New York Stock Exchange and the Pacific Stock Exchange.

The approximate number of shareholders of record of the Company's common stock at October 26, 1990 was 9,600.

Dividends are paid quarterly and have been 6-1/2 cents per share for each quarter in fiscal years 1990 and 1989. As of fiscal year-end 1990, approximately $21.6 million of retained earnings were unrestricted for the payment of cash dividends.

Item 6. Selected Financial Data

(Dollars in millions except per share amounts)		1990	1989	1988	1987	1986
		FISCAL YEARS				
SUMMARY OF OPERATIONS						
Sales	$	1,264.8	1,219.6	1,045.1	872.8	798.3
Operating Earnings (Loss)	$	32.2	69.2	45.2	23.7	(38.0)
Interest Expense, Net	$	(11.5)	(9.6)	(6.3)	(4.5)	(6.3)
Other Income (Expense)	$	-	(6.1)	15.0	8.0	-
Earnings (Loss) from Continuing Operations before Taxes (Benefits)	$	20.7	53.5	53.9	27.2	(44.3)
Taxes (Benefits) on Earnings (Loss)	$	8.1	20.3	19.4	9.0	(27.9)
Earnings (Loss) from Continuing Operations	$	12.6	33.2	34.5	18.2	(16.4)
Earnings (Loss) from Discontinued Operations, Net of Taxes (Benefits)	$	(16.7)	(1.7)	(6.7)	3.2	1.5
Net Earnings (Loss)	$	(4.1)	31.5	27.8	21.4	(14.9)
Net Earnings (Loss) Per Share - Fully Diluted						
Earnings (Loss) Continuing Operations	$	0.64	1.61	1.57	0.84	(0.77)
Earnings (Loss) Discontinued Operations	$	(0.85)	(0.08)	(0.30)	0.14	0.07
Net Earnings (Loss) Per Share	$	(0.21)	1.53	1.27	0.98	(0.70)
Dividends Declared Per Share	$	0.26	0.26	0.26	0.26	0.26
FINANCIAL POSITION AT YEAR END						
Working capital, excluding notes payable	$	270.0	282.7	267.6	258.7	231.2
Property, plant, and equipment (at cost)	$	460.4	511.2	472.6	458.6	429.0
Total assets	$	923.6	931.3	855.8	829.6	790.2
Long-term debt	$	76.8	54.9	35.2	38.1	50.8
Total debt	$	86.9	108.6	49.4	86.9	81.1
Shareholders' equity	$	400.2	427.3	451.0	438.1	410.9
Shareholders' equity per share outstanding	$	20.75	21.48	20.81	19.95	19.16
OTHER DATA						
Shares outstanding at year end (in thousands)		19,288	19,896	21,674	21,966	21,448
Employees		10,200	10,700	10,200	10,400	10,400
Shareholders		9,500	9,500	10,100	10,000	11,000
Order Backlog	$	736.5	727.3	675.6	602.8	522.6
Depreciation expense	$	37.9	34.0	33.7	31.6	28.0
Return from continuing operations, net of taxes (benefits), on average equity	%	3.0	7.6	8.0	4.3	(3.9)
Total debt as a percent of total capital	%	17.8	20.3	9.9	16.6	16.5

Note: Certain amounts in prior years have been restated to reflect discontinued operations. Refer to notes to the consolidated financial statements for information regarding restructuring charges.

This selected financial data should be read in conjunction with the related consolidated financial statements and notes thereto included in Item 8.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

RESULTS OF OPERATIONS

Net earnings from continuing operations before restructuring charges for the fiscal year-ended September 28, 1990 increased 33% to $44.0 million, or $2.25 per share, compared to $33.2 million, or $1.61 per share, in fiscal 1989, and $56.9 million, or $2.59 per share, in fiscal 1988. The 1990 and 1988 results exclude after tax restructuring charges of $31.4 million ($1.61 per share) and $22.4 million ($1.02 per share) respectively. The 1989 results include after tax charges for anticipated legal expenses of $3.8 million, or $.18 per share, in connection with an ongoing government investigation of the power-grid tube industry. The 1988 results include an after tax gain of $9.6 million, or $.44 per share, from the sale of Specialty Metals. Net earnings from continuing operations (inclusive of restructuring charges) for fiscal 1990 were $12.6 million, or $.64 per share, compared to $33.2 million, or $1.61 per share in fiscal 1989 and $34.5 million, or $1.57 per share in fiscal 1988. Fiscal 1990 concluded with a net loss of $4.1 million, or $.21 per share, compared to net earnings of $31.5 million, or $1.53 per share, in fiscal 1989 and $27.8 million, or $1.27 per share, in fiscal 1988. The 1990 net loss includes an aftertax charge and losses of $16.7 million, or $.85 per share, from discontinued operations. Net earnings in 1989 and 1988 include aftertax losses from discontinued operations of $1.7 million, or $.08 per share, and $6.7 million, or $.30 per share, respectively.

Total orders and sales in 1990 matched or exceeded the previous year's record levels. Fiscal 1990 orders of $1.27 billion were essentially the same as the prior year level of $1.26 billion. Sales rose 4% to $1.26 billion in fiscal 1990 from $1.22 billion in 1989 and $1.05 billion in 1988. Backlog was up slightly at $737 million for fiscal 1990 from $727 million in 1989 and $676 million for 1988.

The Instruments and Medical Equipment businesses showed significant increases in orders and sales from the prior year. Electron Devices business orders and sales changed only slightly while the Semiconductor Equipment business posted lower orders, sales, and operating earnings. Operating earnings were up for each of the other three businesses before restructuring charges.

In May 1990, Varian announced a major restructuring to improve longer term financial performance, including plans to sell a number of non-core operations and product lines peripheral to its core businesses--electron devices, analytical instruments, semiconductor equipment, and medical equipment. Concurrently, the Company also began scaling back its worldwide work force to better match its repositioned operations. This effort had resulted in the elimination of some 500 jobs by the end of the fiscal year.

Management's Discussion and Analysis (continued)

Activities to be sold and treated as discontinued operations include broadcasting equipment operations in England and Texas and gallium arsenide-based units in California which make third-generation night vision goggles and complex solid-state circuits. As of year end, Continental Electronics of Texas was sold for approximately $12 million in cash and notes for $2.9 million. A number of minor product lines are also being sold or otherwise disposed of. The operations being exited represent annual sales of about $200 million and employ about 1,600 persons. Varian expects to substantially complete the divestiture of its non-core activities within one year, and believes the reserves taken for those actions are adequate.

Operating profit for the Company's Electron Devices business rose sharply, despite flat sales in its commercial markets and a continuing gradual decline in defense sectors. Improved manufacturing, diligent cost control efforts, and other operational efficiencies contributed to the improved profits. Margins reached double-digit levels by year's end. The business intends to maintain that level of profitability in 1991, even with the likelihood that there will be further shrinkage in some of its markets.

An exceptionally strong fourth-quarter performance led to good orders and sales gains for the Instruments business. Operating profit for the year, before restructuring, rose by nearly 30%, as efforts to improve manufacturing efficiency and quality continued to pay dividends. Sales and profit gains were achieved in most product areas for this business, which has become a prototype in the Company's drive to achieve world-class operational performance.

Semiconductor Equipment orders and sales were below the prior year's levels, reflecting softer demand in the marketplace overall. This business has overcome the problems which frustrated the rollout of its new generation products in the last two years, and has now shipped a substantial number of these new systems. Recent order levels have been reasonably good, and reflect continuing demand for the Company's more established higher margin systems. Although more needs to be done to improve margins on its newer products, this business operated at a profitable level for the year before restructuring charges.

Varian's Medical Equipment business experienced double-digit percent orders and sales increases over 1989 The business benefitted from a combination of international market growth and good customer acceptance of technological advancements for its cancer therapy systems. Order backlog for these systems remains extremely strong, and the business continues to enjoy good profitability.

With the current uncertainties in the world economic environment, Varian is gearing its operations to react quickly to any signs of a significant downturn in its major markets. Phase 1 of the financial reorganization, involving consolidation and cost reduction, has gone well. Phase 2 is focused on attaining Operational Excellence in all of the core businesses. These actions hold the potential for appreciable improvement in the Company's financial performance. The prospects for realizing at least some portion of that added earnings potential in 1991 seem reasonably good, unless the world economy slides into a severe recession.

Management's Discussion and Analysis (continued)

On February 28, 1990, Varian announced that its Board of Directors had elected J. Tracy O'Rourke Chairman of the Board and Chief Executive Officer. Senior operating managers now report directly to Mr. O'Rourke.

Research and development expense of $77.4 million in 1990 continued at about the same level as in the prior two years.

Net interest expense in 1990 was $11.5 million compared with net interest expense of $9.6 million in 1989 and $6.3 million in 1988. The increase in net interest expense was due to increases in the average outstanding obligations in the fiscal year.

The effective tax rate for fiscal 1990 was 39%, compared with 38% and 36% in 1989 and 1988, respectively. The increase in the tax rate from 1989 was due primarily to foreign tax credits not yet utilized. The increase in the tax rate from 1988 was due to several factors. The state effective rate increased because state tax benefits available in prior years had been fully utilized by the end of 1988. The foreign effective rate is higher as a result of certain foreign taxing jurisdictions which do not allow the benefit of tax loss carrybacks. Fiscal 1988 included a non-recurring benefit related to an inventory adjustment for discontinued operations. These increases are partially offset by an increase in the Foreign Sales Corporation (FSC) benefit for 1989 and an adjustment in 1988 related to Domestic International Sales Corporation (DISC) benefits for prior years.

In December 1987, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes (FAS 96), which the Company has not yet adopted. See Summary of Significant Accounting Policies in notes to consolidated financial statements.

FINANCIAL CONDITION

The Company's financial condition remained strong after the restructuring in 1990. Cash provided from operating activities increased to $116.8 million compared with $61.3 million in the prior year. Cash used by investing activities decreased by $32.7 million compared to the prior year, mainly because there were no significant acquisitions of businesses in 1990. The combination of improved cash flow from operations and lower cash consumption by investing activities enabled the Company to reduce net debt by 44% as well as substantially complete the Company's program to purchase common stock. The reduction in debt decreased the ratio of total debt as a percent of total capital to 17.8% at the end of 1990 from 20.3% for the prior year. The ratio of current assets to current liabilities increased from 1.55 to 1 at fiscal year-end 1989 to 1.64 to 1 at year end 1990 due in part to the classification of net assets held for sale--discontinued operations as current assets. The Company has available $100 million in unused committed lines of credit.

Item 8. Financial Statements and Supplementary Data

The response to this item is submitted as a separate section to this report. See Item 14.

Item 9. Disagreements on Accounting and Financial Disclosure

None

PART III

Item 10. Directors, Executive Officers, Promoters, and Control Persons of the Registrant

The information concerning the Company's directors contained in its 1990 Proxy Statement to be filed hereafter is incorporated by reference.

The following table sets forth the names and ages of the registrant's executive officers, together with positions and offices held within the last five years with the registrant by such executive officers. Officers are appointed to serve until the meeting of the Board of Directors following the next Annual Meeting of Stockholders and until their successors have been elected and have qualified.

Name	Age	Position	Term
J. Tracy O'Rourke (Director)	55	Chairman of the Board and Chief Executive Officer	1990-Present
		Executive Vice President and Chief Operating Officer, Rockwell International	1989-1990
		President, Allen Bradley Co.	1978-1989
Allen J. Lauer	53	Executive Vice President	1990-Present
		Senior Vice President and President, Instruments	1989-1990
		President, Instruments	1981-1989
Richard M. Levy	52	Executive Vice President	1990-Present
		Senior Vice President and President, Medical Equipment	1989-1990
		Vice President and President, Medical Equipment	1988-1989
		President, Medical Equipment	1988
		General Manager, Medical Equipment	1986-1988
		Assistant General Manager, Medical Equipment	1981-1986
Al Wilunowski	44	Executive Vice President	1990-Present
		Vice President and President, Electron Devices	1989-1990
		Vice President, Microwave Tube Products	1989
		General Manager, NMR Instruments	1986-1989
		Assistant President, Semiconductor Equipment	1983-1986

Item 10. (continued)

Name	Age	Position	Term
Alan J. Bennett	49	Vice President, Research	1984-Present
Stanley Z. Cole	64	Vice President and Director of Patents and Licensing	1985-Present
		Director, Patents and Licensing	1981-1985
Derrel B. De Passe	42	Vice President, Government Relations	1990-Present
		Director, Government Affairs	1985-1990
Ernest M. Felago	46	Vice President, Human Resources	1987-Present
		Vice President, Human Resources, Chromalloy America Corporation	1983-1987
Alvin J. Ferreira	46	Vice President, Operations	1990-Present
		Manager, Manufacturing, NMR Instruments	1987-1990
		Manager, Production, NMR Instruments	1981-1987
Allen K. Jones	42	Treasurer	1990-Present
		Director, Investor Relations & Financial Services	1987-1990
		Director, Investor Relations	1985-1987
Robert A. Lemos	49	Vice President, Finance	1986-Present
		Vice President and Treasurer	1985-1986
		Treasurer	1982-1985
William R. Moore	58	Secretary and Associate General Counsel	1987-Present
		Senior Corporate Counsel	1979-1987
Joseph B. Phair	43	Vice President & General Counsel	1990-Present
		Associate General Counsel & Director, Legal Operations	1987-1990
		Senior Corporate Counsel	1987
		Corporate Counsel	1983-1987
Gary E. Simpson	52	Vice President, Marketing	1990-Present
		Vice President, Corporate Communications	1983-1990
Wayne P. Somrak	45	Controller	1985-Present
		Operations Controller	1985
		Controller, Semiconductor Equipment	1983-1985
Richard H. Thompson	53	Vice President, International	1990-Present
		Manager, International Development	1984-1990
Thomas D. Sege (Director)	64	Vice Chairman	1990
		Chairman of the Board & Chief Executive Officer	1987-1990
		Chairman of the Board, Chief Executive Officer & President	1986-1987
		Chairman of the Board and Chief Executive Officer	1984-1986

Item 10. (continued)

Name	Age	Position	Term
John J. Cooper (Director)	66	Senior Vice President	1990
		Vice President & General Counsel	1987-1990
		Vice President, General Counsel and Secretary	1979-1987

There is no family relationship between any of the executive officers.

Item 11. Executive Compensation

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions

This item has been omitted inasmuch as the Company will file with the Commission a definite proxy statement pursuant to Regulation 14A before January 14, 1991 and is incorporated by reference.

PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) The following documents are filed as a part of this report:

(1) Consolidated Financial Statements and Report of Independent Accountants: see the index on page 18 of this report.

(2) Consolidated Financial Statement Schedules: see the index on page 18 of this report.

(3) Exhibits: see the index on page 47 of this report.

3-a Registrant's Restated Certificate of Incorporation, dated June 26, 1987. Exhibit incorporated by reference to registrant's Form 10-K for the year ended October 2, 1987, filed December 22, 1987.

3-b Registrant's Bylaws, dated November 16, 1990. Exhibit incorporated by reference to registrant's Form 8-K filed November 19, 1990.

3-c Registrant's Specimen Stock Certificate. Exhibit incorporated by reference to registrant's Form 8-K for the month of February, 1977, filed March 4, 1977.

Item 14. (continued)

4 Preferred Stock Purchase Rights. Exhibit incorporated by reference to registrant's Form 8-A dated August 2, 1986, filed September 2, 1986, and amended by amendment no. 1 dated July 7, 1989.
11 Computation of earnings per share in accordance with interpretive release No. 34-9083
22 Subsidiaries of the Registrant
24 Consent of Independent Accountants
28 Agreement between Varian Associates, Inc. and the Department of Defense concerning termination of Suspension of Continental Electronics and establishment of a continuing surveillance program. Exhibit incorporated by reference to registrant's Form 10-K for the year ended September 29, 1989, filed December 18, 1989.

(b) Reports on Form 8-K:
No reports of Form 8-K have been filed for the last quarter of the period covered by this report.

SIGNATURES

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

VARIAN ASSOCIATES, INC.
(Registrant)

Date: December 19, 1990

By: /s/ Robert A. Lemos
Robert A. Lemos
Vice President, Finance

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

Signature	Title	Date
/s/ J. Tracy O'Rourke J. Tracy O'Rourke	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	December 19, 1990
/s/ Robert A. Lemos Robert A. Lemos	Vice President, Finance (Principal Financial Officer)	December 19, 1990
/s/ Wayne P. Somrak Wayne P. Somrak	Controller (Principal Accounting Officer)	December 19, 1990
/s/ Kenneth J. Arrow Kenneth J. Arrow	Director	December 18, 1990
/s/ John J. Cooper John J. Cooper	Director	December 14, 1990
Ruth Margaret Davis	Director	-
Edward L. Ginzton	Director	-
/s/ C. Lester Hogan C. Lester Hogan	Director	December 18, 1990

Signature	Title	Date
____________ Lewis W. Lehr	Director	-
/s/ Angus A. MacNaughton Angus A. MacNaughton	Director	December 18, 1990
____________ John G. McDonald	Director	-
/s/ William F. Miller William F. Miller	Director	December 18, 1990
/s/ Gordon E. Moore Gordon E. Moore	Director	December 18, 1990
____________ Donald O. Pederson	Director	-
____________ Burton Richter	Director	-
/s/ Thomas D. Sege Thomas D. Sege	Director	December 13, 1990
/s/ H. Myrl Stearns H. Myrl Stearns	Director	December 14, 1990

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES

FORM 10-K

INDEX OF FINANCIAL STATEMENTS AND SCHEDULES

The following financial statements of the registrant and its subsidiaries are required to be included in Item 8:

Consolidated Financial Statements:

The following financial statement schedules of the registrant and its subsidiaries for the fiscal years ended September 28, 1990, September 29, 1989, and September 30, 1988 are required to be included in Item 14(a):

Consolidated Financial Statement Schedules:

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

Coopers
&Lybrand

certified public accountants

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of
Varian Associates, Inc.

We have audited the accompanying consolidated financial statements and financial statement schedules of Varian Associates, Inc. and subsidiary companies as listed in the financial statement index on page 18 of this Form 10-K. 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.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Varian Associates, Inc. and subsidiary companies as of September 28, 1990 and September 29, 1989, and the consolidated results of their operations and their cash flows for each of the three fiscal years in the period ended September 28, 1990 in conformity with generally accepted accounting principles. In addition, the financial statement schedules referred to above, when considered in relation to the basic financial statements taken as a whole, present fairly the information required to be included therein.

Coopers & Lybrand

COOPERS & LYBRAND

San Jose, California
October 19, 1990

CONSOLIDATED STATEMENTS OF OPERATIONS
Varian Associates, Inc. and Subsidiary Companies

(Dollars in thousands except per share amounts)	1990	1989	1988
	For each of the three fiscal years in the period ended September 28, 1990		
SALES	$1,264,840	$1,219,604	$1,045,142
OPERATING COSTS AND EXPENSES			
Cost of sales	872,233	853,192	696,657
Research and development	77,402	72,650	69,786
Marketing	156,259	145,707	135,410
General and administrative	75,272	78,819	63,074
Restructuring charges	51,482	-	35,018
Total operating costs and expenses	1,232,648	1,150,368	999,945
OPERATING EARNINGS	32,192	69,236	45,197
Interest expense	(13,021)	(10,791)	(7,915)
Interest income	1,487	1,192	1,583
Other income (expense)	-	(6,100)	15,059
EARNINGS FROM CONTINUING OPERATIONS BEFORE TAXES	20,658	53,537	53,924
Taxes on Earnings	8,060	20,340	19,410
EARNINGS FROM CONTINUING OPERATIONS	12,598	33,197	34,514
LOSS FROM DISCONTINUED OPERATIONS NET OF TAX BENEFITS	(16,690)	(1,678)	(6,756)
NET EARNINGS (LOSS)	$ (4,092)	$ 31,519	$ 27,758
EARNINGS (LOSS) PER SHARE - FULLY DILUTED			
CONTINUING OPERATIONS	$ 0.64	$ 1.61	$ 1.57
DISCONTINUED OPERATIONS	(0.85)	(0.08)	(0.30)
NET EARNINGS (LOSS) PER SHARE	$ (0.21)	$ 1.53	$ 1.27

See accompanying notes to the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS
Varian Associates, Inc. and Subsidiary Companies

(Dollars in thousands except par values)	September 28, 1990	September 29, 1989
ASSETS		
Current Assets		
Cash and cash equivalents	$ 26,185	$ -
Accounts receivable, less allowances for doubtful accounts of $1,852 (1990) and $1,711 (1989)	256,602	263,738
Inventories	222,321	285,725
Other current assets	117,636	93,774
Net assets held for sale - discontinued operations	45,053	-
Total Current Assets	667,797	643,237
Property, Plant, and Equipment	460,412	511,213
Accumulated depreciation and amortization	(246,085)	(258,442)
Net Property, Plant, and Equipment	214,327	252,771
Other Assets	41,450	35,273
TOTAL ASSETS	$ 923,574	$ 931,281
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Notes payable	$ 10,037	$ 53,648
Accounts payable - trade	71,143	74,528
Accrued expenses	223,385	182,836
Product warranty	34,260	29,910
Advance payments from customers	69,021	73,279
Total Current Liabilities	407,846	414,201
Long-Term Debt	76,822	54,914
Deferred Taxes	38,695	34,885
Total Liabilities	523,363	504,000
Shareholders' Equity		
Preferred stock		
Authorized 1,000,000 shares, par value $1, issued none	-	-
Common stock		
Authorized 99,000,000 shares, par value $1, issued and outstanding 19,288,000 shares (1990), 19,896,000 shares (1989)	19,288	19,896
Capital in excess of par value of common stock	94,005	111,356
Retained earnings	286,918	296,029
Total Shareholders' Equity	400,211	427,281
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 923,574	$ 931,281

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Varian Associates, Inc. and Subsidiary Companies

(Dollars in thousands except per share amounts)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock at Cost	Total
Balances, October 2, 1987	$ 21,966	$ 168,437	$ 247,713	$ -	$ 438,116
Net earnings for the year	-	-	27,758	-	27,758
Issuance of stock under employee stock purchase and option plans	392	8,256	-	-	8,648
Purchase of common stock	-	-	-	(17,840)	(17,840)
Retirement of treasury stock	(684)	(17,156)	-	17,840	-
Dividends declared ($0.26 per share)	-	-	(5,680)	-	(5,680)
Balances, September 30, 1988	21,674	159,537	269,791	-	451,002
Net earnings for the year	-	-	31,519	-	31,519
Issuance of stock under employee stock purchase and option plans	459	10,152	-	-	10,611
Purchase of common stock	-	-	-	(60,570)	(60,570)
Retirement of treasury stock	(2,237)	(58,333)	-	60,570	-
Dividends declared ($0.26 per share)	-	-	(5,281)	-	(5,281)
Balances, September 29, 1989	19,896	111,356	296,029	-	427,281
Net loss for the year	-	-	(4,092)	-	(4,092)
Issuance of stock under employee stock purchase and option plans	563	10,295	-	-	10,858
Purchase of common stock	-	-	-	(28,817)	(28,817)
Retirement of treasury stock	(1,171)	(27,646)	-	28,817	-
Dividends declared ($0.26 per share)	-	-	(5,019)	-	(5,019)
Balances, September 28, 1990	$ 19,288	$ 94,005	$ 286,918	$ -	$ 400,211

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
Varian Associates, Inc. and Subsidiary Companies

For each of the three fiscal years in the period ended September 28, 1990

(Dollars in thousands)	1990	1989	1988
OPERATING ACTIVITIES			
Net Cash Provided by Operating Activities	$ 116,791	$ 61,290	$ 39,826
INVESTING ACTIVITIES			
Proceeds from sale of businesses	12,000	7,043	32,500
Proceeds from sale of property, plant, and equipment	6,305	3,874	5,993
Purchase of property, plant, and equipment	(54,936)	(48,968)	(43,238)
Purchase of businesses, net of cash acquired	(1,923)	(37,385)	-
Other, net	(5,292)	(1,110)	-
Net Cash Used by Investing Activities	(43,846)	(76,546)	(4,745)
FINANCING ACTIVITIES			
Net borrowings (payments) on short-term obligations	(42,161)	32,059	(34,607)
Proceeds from long-term borrowings	40,000	30,029	450
Principal payments on long-term debt	(19,543)	(2,892)	(3,385)
Proceeds from common stock issued to employees	10,858	10,611	8,648
Purchase of common stock	(28,817)	(60,570)	(17,840)
Dividends paid	(5,063)	(5,408)	(5,710)
Other, net	(1,019)	-	708
Net Cash Provided (Used) by Financing Activities	(45,745)	3,829	(51,736)
EFFECTS OF EXCHANGE RATE CHANGES ON CASH	(1,015)	(112)	257
Net Increase (Decrease) in Cash and Cash Equivalents	26,185	(11,539)	(16,398)
Cash and Cash Equivalents at Beginning of Year	-	11,539	27,937
Cash and Cash Equivalents at End of Year	$ 26,185	$ -	$ 11,539

DETAIL OF NET CASH PROVIDED BY OPERATING ACTIVITIES

	1990	1989	1988
Net Earnings (Loss)	$ (4,092)	$ 31,519	$ 27,758
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities			
Depreciation	41,337	40,656	40,424
Deferred taxes	3,810	1,751	7,365
Undistributed earnings from affiliates less dividends received	(560)	528	(1,108)
Gain from sale of businesses	-	(3,081)	(15,059)
Loss from sale of assets	210	519	1,007
Amortization of intangibles	4,290	3,308	2,606
Abandonment of intangibles and write-off of other assets	20,965	-	15,579
Changes in assets and liabilities, net of affects of acquisitions and dispositions of businesses:			
Accounts receivable	(1,528)	(5,190)	(43,876)
Inventories	27,350	(25,844)	(19,772)
Other current assets	(26,364)	(13,111)	(10,475)
Accounts payable - trade	(2,119)	14,893	(1,787)
Accrued expenses	46,477	7,921	20,891
Product warranty	4,280	5,901	372
Advance payments from customers	2,735	1,520	15,901
Net Cash Provided by Operating Activities	$ 116,791	$ 61,290	$ 39,826

See accompanying notes to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include those of Varian Associates, Inc. and its subsidiaries. Significant intercompany balances, transactions, and stock holdings have been eliminated in consolidation. Investments in less-than-majority-owned affiliated companies are stated at equity in the net assets of these companies.

Foreign Currency Translation

Assets and liabilities of subsidiaries outside the United States representing cash and amounts receivable or payable are translated into U.S. dollars at the exchange rates in effect at year end. Other accounts including inventories and property, plant, and equipment are translated at historical exchange rates. Revenue and expense items are translated at effective rates of exchange prevailing during each year, except that inventories are charged to cost of sales, and depreciation is expensed at historical exchange rates. The aggregate exchange gain (loss) included in general and administrative for 1990, 1989, and 1988 was $6.5 million, ($4.8) million, and $1.4 million, respectively.

The Company obtains forward exchange contracts in order to mitigate the effects of foreign exchange rate changes on net monetary balances and order backlog. At fiscal year-end 1990, the Company had contracts with maturities of three months or less to purchase $46.5 million in foreign currency (25.3 million pounds sterling).

Revenue Recognition

Sales and related cost of sales are recognized primarily upon shipment of products. Sales and related cost of sales under long-term contracts to commercial customers and the U.S. Government are recognized primarily as units are delivered.

The estimated sales values of performance under certain U.S. Government fixed-price and fixed-price incentive contracts in process are recognized under the percentage of completion method of accounting where the sales value is determined on the basis of physical completion and costs are expensed as incurred. Sales under cost-reimbursement contracts, primarily research and development contracts, are recorded as costs are incurred and include estimated earned fees in the proportion that costs incurred to date bear to total estimated costs. The fees under certain U.S. Government contracts may be increased or decreased in accordance with cost or performance incentive provisions which measure actual performance against established targets or other criteria. Such incentive fee awards or penalties are included in revenue at the time the amounts can be reasonably determined.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Statements of Cash Flows

The Company considers currency on hand, demand deposits, and all highly liquid investments with an original maturity of three months or less to be cash and cash equivalents. Liabilities assumed in the purchases of businesses were $4.6 million and $5.8 million in fiscal 1990 and 1989, respectively.

Inventories

Inventories are valued at the lower of cost or market (realizable value) using last-in, first-out (LIFO) cost for the U.S. inventories of the Instruments, Semiconductor Equipment, and Medical Equipment segments. All other inventories are valued principally at average cost. Approximately half of total gross inventories are valued using the LIFO method. If the first-in, first-out (FIFO) method had been used, inventories would have been higher than reported by $54.3 million in fiscal 1990, $47.5 million in fiscal 1989, and $45.0 million in fiscal 1988. Inventories related to long-term contracts amounted to $15.9 million and $35.1 million at fiscal year-end 1990 and 1989, respectively. These amounts are net of progress payments of $4.5 million and $8.8 million, respectively. Inventoried costs relating to long-term contracts are stated at actual production costs, and generally do not include start-up or general and administrative costs. Inventory balances in 1990 reflect the reclassification of discontinued operation's inventories to net assets held for sale--discontinued operations. The main components of inventories are as follows:

(Dollars in millions)	1990	1989
Raw materials and parts	$113.3	$140.7
Work in process	73.2	101.7
Finished goods	35.8	43.3
Total Inventories	$222.3	$285.7

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost. Major improvements are capitalized, while maintenance and repairs are expensed currently. Plant and equipment are depreciated over their estimated useful lives using the straight-line method for financial reporting purposes and accelerated methods for tax purposes. Leasehold improvements are amortized using the straight-line method over their estimated useful lives or the length of the lease, whichever is less. Property, plant, and equipment balances in 1990 reflect the reclassification of the discontinued operation's balances to net assets held for sale--discontinued operations.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The main components of property, plant, and equipment are as follows:

(Dollars in millions)	1990	1989
Land and land leaseholds	$ 9.4	$ 14.3
Buildings	153.4	172.3
Machinery and equipment	279.9	301.2
Construction in progress	17.7	23.4
Total Property, Plant, and Equipment	$460.4	$511.2

Taxes on Earnings

Deferred recoverable tax benefits of $93.5 million at fiscal year-end 1990 and $70.0 million at fiscal year-end 1989 are included in other current assets. These resulted principally from product warranty provisions, inventory reserves, reserves for discontinued operations, and special provisions not currently deductible for tax purposes. In addition, other current assets include refundable taxes of $3.2 million at fiscal year-end 1990 and $3.2 million at fiscal year-end 1989, resulting from the carryback of operating losses and credits. Deferred tax credits of $38.7 million at fiscal year-end 1990 and $34.9 million at fiscal year-end 1989 arose primarily from the use of accelerated depreciation methods for tax purposes and from foreign tax credits not yet utilized for financial reporting purposes.

The Company plans to continue reinvesting earnings of its non-U.S. subsidiaries to expand its international activities. Therefore, it makes no provision for additional U.S. taxes which might result from distribution of such earnings unless they are actually repatriated. In 1990, the Company repatriated $2.5 million of earnings from a non-U.S. subsidiary, providing U.S. tax of $1.4 million. Amounts repatriated in 1989 and 1988 were not significant. At fiscal year-end 1990, 1989, and 1988, the cumulative amount of earnings from certain subsidiaries on which the Company has not provided U.S. income taxes was approximately $29 million, $22 million, and $19 million, respectively.

The Company has a Foreign Sales Corporation (FSC) to assist with its export activities. A portion of the earnings of the FSC is taxable and provision has been made for those taxes.

In December 1987, the Financial Accounting Standards Board (FASB) issued Statement No. 96, Accounting for Income Taxes (FAS 96). This statement requires a major change in the method used to account for income taxes. The statement is effective for the Company's fiscal year 1993; earlier adoption is permitted and being considered. The FASB is currently reconsidering certain relevant aspects of FAS 96. The Company is currently studying the implications of the statement, but the timing and impact of its implementation has not yet been determined.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Research and Development

Company-sponsored research and development costs related to both present and future products are expensed currently. Costs related to research and development contracts are included in inventory and charged to cost of sales upon recognition of related revenue. Total expenditures on research and development for fiscal 1990, 1989, and 1988, were $90.7 million, $86.5 million, and $77.7 million, respectively, of which $13.3 million, $13.9 million, and $7.9 million, respectively, were funded by customers.

Computation of Earnings Per Share

Earnings per share computations are based on the weighted average common shares outstanding and common share equivalents (dilutive stock options). The average number of common shares and common share equivalents used in the computation of earnings per share in 1990, 1989, and 1988 was 19,538,000, 20,659,000, and 21,936,000 shares, respectively. There is no significant difference between fully diluted earnings per share and primary earnings per share.

Reclassification

Certain amounts in prior years have been reclassified to conform with the 1990 presentation.

RESTRUCTURING CHARGES

During 1990, the Company incurred restructuring charges aggregating $51.5 million in connection with the discontinuation of various product lines and consolidation of certain facilities. The charges consist mainly of provisions for discontinued programs and charges for business restructuring activities and termination reserves.

During 1988, the Company incurred restructuring charges of $35.0 million for a major cost reduction effort that resulted in consolidation of two divisions and the discontinuation of a product line in the Semiconductor Equipment business, as well as other actions undertaken as part of a companywide cost reduction effort. The restructuring charges are composed mainly of asset write-offs and estimated accruals associated with move and rearrangement, continued product support, termination, and other costs.

OTHER INCOME (EXPENSE)

In 1989, other expense of $6.1 million represents charges for anticipated legal expenses in connection with an ongoing government investigation of the power-grid tube industry. (See Contingencies Note.)

In 1988, other income of $15.0 million represents the gain on the sale of Specialty Metals. Sales for Specialty Metals amounted to $17.4 million in fiscal 1988. Proceeds from the sale were $32.5 million.

DISCONTINUED OPERATIONS

During 1990, the Company announced plans to sell its broadcasting equipment operations in England and Texas and gallium arsenide-based units in California. These businesses are being accounted for as discontinued operations. The sale of Continental Electronics in Texas was consummated in September, 1990. The Company received $12 million in cash and notes for $2.9 million. Formal plans have been developed, and it is expected that the divestitures of the remaining operations will be completed within one year. Amounts in the consolidated statements of operations for 1989 and 1988 have been restated to conform to the 1990 discontinued operations presentation. The estimated loss on discontinuance of the businesses was $15.2 million (net of income tax benefits of $7.3 million) consisting of an expected aftertax loss on the sale of the businesses of $7.7 million and a provision of $7.5 million for expected operating losses during the phase-out period of one year. Sales and net losses from the discontinued operations prior to the measurement date are as follows:

(Dollars in millions)	1990	1989	1988
Sales	$ 67.1	$132.8	$133.6
Loss before tax benefits	2.4	2.7	10.6
Tax benefits	.9	1.0	3.8
Loss from operations	1.5	1.7	6.8
Loss on disposal, net of tax benefits of $7.3 in 1990	15.2	-	-
Net Loss	$ 16.7	$ 1.7	$ 6.8

The net assets of the discontinued businesses held for sale have been included in the accompanying balance sheet at September 28, 1990, under the caption "Net assets held for sale - discontinued operations." This balance consists of current assets of $37.1 million, noncurrent assets of $28.1 million, and current liabilities of $20.1 million.

RECEIVABLES FROM LONG-TERM CONTRACTS

Accounts receivable from long-term contracts were $11.8 million and $33.3 million in 1990 and 1989, respectively. U.S. Government contracts were $8.9 million and $16.9 million in 1990 and 1989, respectively. In addition, Commercial contracts were $2.9 million and $16.4 million in 1990 and 1989, respectively.

The balances billed but not paid by customers pursuant to retainage provisions were not significant at fiscal year-end 1990 and 1989. Based on the Company's experience with similar contracts in recent years, the retention balances at fiscal year-end 1990 are expected to be collected in fiscal 1991.

Recoverable costs and accrued profit not billed comprise principally amounts of revenue recognized on contracts for which billings had not been presented to the customers because the amounts were not billable at the balance sheet date. It is anticipated such unbilled amounts receivable from the U.S. Government and commercial customers at fiscal year-end 1990 will be billed and collected in fiscal 1991.

No significant amounts were subject to future negotiation at fiscal year-end 1990 and 1989.

ACCRUED EXPENSES

(Dollars in millions)	1990	1989
Taxes, including taxes on earnings	$ 26.2	$ 21.5
Payroll and employee benefits	59.5	53.7
Restructuring and discontinued businesses	43.3	15.1
Estimated loss contingencies	23.6	27.2
Other	70.8	65.3
Total Accrued Expenses	$223.4	$182.8

SHORT-TERM DEBT

Short-term notes payable and the current portion of long-term debt amounting to $10.0 million and $53.6 million at fiscal year-end 1990 and 1989, respectively, represent borrowings at weighted average interest rates of 10.0% and 9.4%, respectively. Total debt is subject to limitations included in long-term debt agreements.

At fiscal year-end 1990, the Company had total unused committed lines of credit amounting to $100 million.

LONG-TERM DEBT

(Dollars in millions)	1990	1989
Unsecured term loan, LIBOR+1/4% (effectively fixed at 8.27% through December 31, 1991 through an interest rate exchange agreement), due December 31, 1992	$ 40.0	$ -
Unsecured term loan, 9.9% due in annual installments of $6.0 through 1994	24.0	30.0
Unsecured term loan, 9.5% due in annual installments of $2.5 through 1995	12.5	15.0
Mortgage loans, interest rates range from 9.5% to 9.88% payable through 2005	8.5	18.4
Other	.7	1.8
Long-term borrowings	85.7	65.2
Less current portion	8.9	10.3
Long-Term Debt	$ 76.8	$ 54.9

Each of the unsecured term loans contain covenants which limit future borrowings and require the Company to maintain certain levels of working capital and operating results. At fiscal year-end 1990, the Company was in compliance with all restrictive covenants of the loan agreements and approximately $21.6 million of retained earnings were unrestricted for payment of cash dividends. Mortgage loans are collateralized by various land and buildings.

Required principal repayments of long-term debt for fiscal years 1991 through 1995 are as follows, in millions: $8.9, $8.9, $48.9, $10.0, and $2.9.

Interest paid on short-term and long-term debt was $14.0 million in fiscal 1990, $10.4 million in fiscal 1989 and $7.9 million in fiscal 1988.

STOCK OPTION AND PURCHASE PLANS

As of fiscal year-end 1990, the Company had reserved 2,344,000 shares of common stock for issuance to officers and key employees under stock option plans. All options under the incentive and non-qualified plans have been granted at prices equal to the fair market value of the stock on the date of grant.

Options granted on or before February 10, 1987 are exercisable commencing one year following date of grant, expire if not exercised within ten, seven, or five years from date of grant, and, based on issue date, are exercisable in cumulative installments of one-quarter, one-third, or one-half each year. Options granted on or after February 11, 1987 are exercisable in cumulative installments of one-third each year, commencing one year following date of grant, and expire if not exercised within seven years from date of grant.

STOCK OPTIONS AND PURCHASE PLANS (continued)

Option activity under the plans is presented below:

(Dollars in millions except per share amounts, shares in thousands)	1990 Shares	1990 Dollars	1989 Shares	1989 Dollars	1988 Shares	1988 Dollars
Beginning of year	1,653	$ 44.1	1,419	$ 36.6	1,139	$ 28.7
Granted	868	18.9	439	12.8	436	12.2
Terminated or expired	(195)	(5.3)	(93)	(2.7)	(109)	(3.3)
Exercised	(91)	(2.3)	(112)	(2.6)	(47)	(1.0)
End of Year	2,235	$ 55.4	1,653	$ 44.1	1,419	$ 36.6
Shares exercisable	838		460		66	
Available shares remaining	109		782		1,127	

Options were outstanding at prices ranging from $21.19 to $36.25 per share at fiscal year-end 1990. Options were exercised at prices ranging from $23.50 to $29.25 for fiscal 1990, $12.10 to $24.19 for fiscal 1989, and $7.82 to $33.69 for fiscal 1988.

The Employee Stock Purchase Plan (ESPP) covers substantially all employees in the United States and Canada. The participants' purchase price is the lower of 85% of the closing market price on the participants' most recent enrollment date, or 85% of the closing market price on the last trading day of the fiscal quarter. The discount is treated as equivalent to the cost of issuing stock for financial reporting purposes.

During fiscal 1990, 1989, and 1988, 380,000 shares, 322,000 shares, and 314,000 shares were purchased for $7.3 million, $6.9 million, and $6.8 million, respectively. At fiscal year-end 1990, the Company had a balance of 468,000 shares reserved for the ESPP.

PREFERRED STOCK PURCHASE RIGHTS

At September 28, 1990, there were issued and outstanding 19,288,000 preferred stock purchase rights (one right for each outstanding common share). Each right entitles the holder to buy one one-hundredth of a share of the Company's Series A Junior Participating Preferred Stock for $125. Of the 1,000,000 shares of authorized preferred stock, 280,000 shares have been designated as Series A Junior Participating Preferred Stock, to be issued upon exercise of the rights. Upon issuance, these preferred shares will have certain voting, dividend, and liquidation preferences over the common stock, as described in the Rights Agreement of August 25, 1986, as amended.

PREFERRED STOCK PURCHASE RIGHTS (continued)

The rights are exercisable ten days after a person or group has acquired 15% or more of the Company's voting stock or the tenth day (or such later date as may be determined by the Board of Directors) after the date of the commencement or announcement of a person's or group's intention to commence a tender or exchange offer whose consummation will result in the ownership of 30% or more of the stock. If a person or group becomes the beneficial owner of 15% or more of the voting stock, each right would entitle the holder, other than the acquiring person or group, to buy shares of the Company's Series A Junior Participating Preferred Stock having a market value of $250 for the exercise price of $125. If the Company were to be merged into another entity, or merge with another entity and the common stock were changed into other securities or assets, each right would entitle the holder to purchase for the exercise price of $125, common stock of the acquiring company equal to a market value of twice the exercise price, or $250.

The rights expire on August 25, 1996 but may be redeemed by the Board of Directors of the Company for $.05 per right at any time before they become exercisable.

RETIREMENT PLANS

The Company has several defined contribution retirement plans covering substantially all of its employees. Total pension expense amounted to $15.8 million for fiscal 1990, $16.4 million for fiscal 1989, and $13.5 million for fiscal 1988. The major obligation is to contribute an amount based on a percentage of each participants' base pay. The Company also contributes 5% of its consolidated earnings from continuing operations before taxes, as adjusted for discretionary items, as retirement plan profit sharing. Participants are entitled, upon termination or retirement, to their portion of the retirement fund assets, which are held by a third-party trustee.

A number of the Company's foreign subsidiaries have defined benefit retirement plans for regular full-time employees. The Company adopted the provisions of Statement of Financial Accounting Standards No. 87, "Employer's Accounting for Pensions," for its foreign retirement plans effective with fiscal 1990. The 1990 pension amount includes the income effect of the adoption which was not material to the Company's consolidated financial statements.

TAXES ON EARNINGS

U.S. federal income tax returns for the years through 1980 have been settled with the Internal Revenue Service. It is believed that adequate provision has been made for all open years and unresolved issues. The detail of taxes (benefits) on earnings (loss) is as follows:

(Dollars in millions)	1990	1989	1988
Current			
U.S. federal	$ 9.5	$ 11.0	$ 5.3
Non-U.S.	8.7	7.9	10.0
State and local	1.3	4.3	1.7
Total current	19.5	23.2	17.0
Deferred			
U.S. federal	(19.3)	(4.1)	(0.3)
Non-U.S.	(0.3)	0.2	(1.1)
Total deferred	(19.6)	(3.9)	(1.4)
Taxes (Benefits) on Earnings (Loss)	$ (0.1)	$ 19.3	$ 15.6

Deferred taxes on earnings result from timing differences between income reported in the financial statements and taxable income. The tax effects of these differences are as follows:

(Dollars in millions)	1990	1989	1988
Inventory adjustments	$ (5.7)	$ (1.5)	$ 3.4
Changes in provisions for discontinued operations	(12.7)	(0.8)	(2.9)
Product warranty	(1.5)	(1.8)	(0.3)
Deferred income	(0.3)	(0.5)	0.3
Accelerated depreciation	-	2.8	5.9
Installment sales	-	-	(5.7)
Other	0.6	(2.1)	(2.1)
Total Deferred	$(19.6)	$ (3.9)	$ (1.4)

TAXES ON EARNINGS (continued)

The reconciliation between the effective tax rates on continuing operations and the statutory federal income tax rates is shown in the following schedule:

	1990	1989	1988
Statutory federal income tax rate	34.0 %	34.0 %	34.0 %
State and local taxes, net of federal tax benefit	6.2	5.6	2.5
Net investment tax credit recapture	0.5	0.4	0.6
Foreign income deemed permanently invested, net of foreign tax credits utilized and foreign taxes	4.3	2.0	0.5
FSC/DISC	(5.5)	(3.0)	1.4
Inventory adjustment on discontinued operations	-	-	(1.8)
Charitable contributions	-	(0.6)	(0.9)
Other	(0.5)	(0.4)	(0.3)
Effective Tax Rate	39.0 %	38.0 %	36.0 %

Income taxes paid (refunded) are as follows:

(Dollars in millions)	1990	1989	1988
Federal income taxes paid	$ 6.9	$ 12.7	$ 1.6
Federal income taxes refunded from prior years	-	(0.5)	(5.3)
State income taxes paid, net	3.9	5.0	1.3
Foreign income taxes paid, net	4.3	11.1	7.1
Total Paid	$ 15.1	$ 28.3	$ 4.7

The amounts refunded in 1989 and 1988 are the result of Net Operating Loss and General Business Tax Credit carrybacks from 1987 to 1984 and from 1986 to 1983 and 1984, respectively.

LEASE COMMITMENTS

At fiscal year-end 1990, the Company was committed to minimum rentals under noncancellable operating leases for fiscal years 1991 through 1995 and thereafter as follows, in millions: $14.2, $11.3, $8.5, $5.2, $2.9, and $4.5. Rental expense for fiscal years 1990, 1989, and 1988 was $33.8, $32.9, $34.0, respectively.

CONTINGENCIES

On September 21, 1988, Rodney Shields, who purports to be a stockholder of the Company, filed a stockholder's derivative action in the Superior Court of the State of California, County of Santa Clara. The complaint alleges that the Company obtained certain defense contracts by illegal means and overcharged the government in connection with other defense contracts. Mr. Shields further alleged that certain named individuals, including 17 present or former directors and officers of the Company, breached their fiduciary duties and violated various provisions of the California Business and Professions Code. On June 26, 1989, the court dismissed the complaint with leave to amend due to Mr. Shields' failure to make a pre-litigation demand on the Company's Board of Directors. On July 26, 1989, Mr. Shields amended his complaint, and on February 21, 1990, the court dismissed the amended complaint with leave to amend due to Mr. Shields' continued failure to make a demand.

On April 9, 1990, Mr. Shields demanded that the Company institute legal proceedings against the individuals allegedly responsible for the conduct described in Mr. Shields' amended complaint. On May 11, 1990, the Board of Directors of the Company determined that the commencement of the litigation sought by Mr. Shields would not serve the best interests of the Company. On September 24, 1990, the plaintiff filed a second amended complaint, alleging that Varian's Board of Directors wrongfully refused the plaintiff's demand that the Board cause the Company to commence legal action against the defendants named in the plaintiff's prior complaints. The Company and the defendant officers and directors filed a motion to dismiss the second amended complaint.

In addition to the above, the grand jury sitting in connection with the U.S. Department of Justice antitrust investigation of the power-grid tube industry which issued subpoenas to the Company and a number of its employees in August 1989 expired in June 1990 with no indictments returned. The Company has been informed that the investigation is continuing.

In February 1990 a civil action was brought by Panache Broadcasting of Pennsylvania, Inc. against the Company and a joint venture partner alleging that the activities of their joint venture in the power-grid tube industry violate antitrust laws. The complaint seeks injunctive relief and unspecified damages which may be trebled under the antitrust laws. The action, which was filed in the U.S. District Court in Philadelphia, has been transferred to the U.S. District Court in Chicago. Discovery has not yet taken place with respect to the Company. The Company believes that it has meritorious defenses to the Panache action and actions that could result from the Department of Justice investigation.

In addition to the above-referenced matters, the Company is currently a defendant in a number of legal actions and could incur an uninsured liability in one or more of them. In the opinion of management, the outcome of such litigation will not have a material adverse effect on the financial condition of the Company.

CONTINGENCIES (continued)

The Company is involved in various stages of investigation and cleanup relative to environmental protection matters, some of which relate to past disposal practices. Some of these matters are being overseen by state or federal agencies. Management believes that the final disposition of these matters will not have a material adverse effect on the financial condition of the Company.

BUSINESS SEGMENTS

Prior year industry segment data has been restated to conform with the current year presentation of continuing operations. The four industry segments are: Electron Devices business, Instruments business, Semiconductor Equipment business, and the Medical Equipment business. Indirect and common costs have been allocated through the use of estimates. Accordingly, the information is provided for purposes of achieving an understanding of operations, but may not be indicative of the financial results of the reported segments were they independent organizations. In addition, comparisons of the Company's operations to similar operations of other companies may not be meaningful.

The Electron Devices business includes a broad line of electron devices used in broadcasting, communications, and other commercial and military applications. The Instruments business consists of analytical instruments widely used in the fields of chemistry, physics, biology, life sciences, and metallurgy. The Semiconductor Equipment business includes equipment used for semiconductor wafer fabrication. The Medical Equipment business includes linear accelerators used for cancer therapy and industrial testing and inspection. Included in Eliminations and Other are certain insignificant support operations and the Vacuum Products operation.

The Company operates various manufacturing and marketing operations outside the United States. Geographic segment information is based on the location of the operation furnishing goods and services. No single country outside the United States accounts for more than 10% of total sales or total assets. Sales between geographic areas are accounted for at cost plus prevailing markups arrived at through negotiations between independent profit centers. Related profits are eliminated in consolidation.

Included in the total of United States sales are export sales of $203 million in fiscal 1990, $210 million in fiscal 1989, and $166 million in fiscal 1988. Sales under prime contracts from the U.S. Government were approximately $90 million in fiscal 1990, $111 million in fiscal 1989, and $119 million in fiscal 1988.

INDUSTRY SEGMENTS

(Dollars in millions)	Sales			Pre-Tax Operating Earnings (Loss)			Identifiable Assets			Capital Expenditures			Depreciation		
	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988	1990	1989	1988
Electron Devices	$ 411	$ 408	$ 376	$ 24	$ 18	$ 39	$258	$260	$246	$ 15	$ 16	$ 11	$ 14	$ 12	$ 13
Instruments	268	234	231	19	19	20	148	132	125	9	7	7	6	5	5
Semiconductor Equipment	298	323	213	(24)	25	2	157	178	108	16	6	3	7	6	6
Medical Equipment	221	195	168	30	28	20	100	90	83	5	6	5	3	2	2
Eliminations & Other	67	60	57	(7)	(10)	(13)	64	61	69	5	7	5	5	5	4
Total Industry Segments	1,265	1,220	1,045	42	80	68	727	721	631	50	42	31	35	30	30
General Corporate	-	-	-	(9)	(16)	(8)	151	102	115	3	6	4	3	4	4
Interest, Net	-	-	-	(12)	(10)	(6)	-	-	-	-	-	-	-	-	-
Continuing Operations	$1,265	$1,220	$1,045	$ 21	$ 54	$ 54	$878	$823	$746	$ 53	$ 48	$ 35	$ 38	$ 34	$ 34

1990 results include a restructuring charge of $51.5 million for expenses related to the phasing out of certain product lines and other related expenses including employee terminations, facility consolidations, and asset revaluations. The restructuring charges for 1990 are allocated as follows:

Electron Devices	$ 14.6
Instruments	5.2
Semiconductor Equipment	27.0
Other	3.3
General Corporate	1.4
	$ 51.5

1989 results include General Corporate charges for anticipated legal expenses of $6.1 million in connection with an ongoing government investigation of the power-grid tube industry.

1988 results include a gain in Semiconductor Equipment on the sale of Specialty Metals of $15.0 million and restructuring charges of $35.0 million. The restructuring charges for 1988 are allocated as follows:

Instruments	$ 2.9
Semiconductor Equipment	25.8
General Corporate	6.3
	$35.0

GEOGRAPHIC SEGMENTS

(Dollars in millions)	Sales to Unaffiliated Customers 1990	1989	1988	Intergeographic Sales to Affiliates 1990	1989	1988	Total Sales 1990	1989	1988	Pre-Tax Operating Earnings (Loss) 1990	1989	1988	Identifiable Assets 1990	1989	1988
United States	$ 883	$ 883	$ 744	$ 194	$ 158	$ 136	$1,077	$1,041	$ 880	$ 31	$ 78	$ 61	$ 484	$ 507	$ 418
International	322	283	253	41	35	51	363	318	304	18	12	20	179	153	144
Eliminations & Other	60	54	48	(235)	(193)	(187)	(175)	(139)	(139)	(7)	(10)	(13)	64	61	69
Total Geographic Segments	1,265	1,220	1,045	-	-	-	1,265	1,220	1,045	42	80	68	727	721	631
General Corporate	-	-	-	-	-	-	-	-	-	(9)	(16)	(8)	151	102	115
Interest, Net	-	-	-	-	-	-	-	-	-	(12)	(10)	(6)	-	-	-
Continuing Operations	$1,265	$1,220	$1,045	$ -	$ -	$ -	$1,265	$1,220	$1,045	$ 21	$ 54	$ 54	$ 878	$ 823	$ 746

1990 results include a restructuring charge of $51.5 million for expenses related to the phasing out of certain product lines, and other related expenses including employee terminations, facility consolidations, and asset revaluations.

1989 results include General Corporate charges for anticipated legal expenses of $6.1 million in connection with an ongoing government investigation of the power grid tube industry.

1988 results include restructuring charges of $35.0 million and the gain on the sale of Specialty Metals of $15.0 million.

QUARTERLY FINANCIAL DATA (UNAUDITED)

(Dollars in millions except per share amounts)

	1990					1989				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
Sales	$ 285.4	301.3	344.6	333.5	1,264.8	$ 257.4	329.9	305.2	327.1	1,219.6
Gross Profit	$ 90.5	93.5	102.2	106.3	392.5	$ 85.5	98.5	93.2	89.2	366.4
Net Earnings (Loss)										
Continuing Operations	$ 8.2	8.7	(18.9)	14.6	12.6	$ 10.1	12.4	9.0	1.6	33.2
Discontinued Operations	(0.6)	(0.9)	(15.2)	0.0	(16.7)	(0.8)	(0.4)	0.1	(0.6)	(1.7)
Net Earnings (Loss)	$ 7.6	7.8	(34.1)	14.6	(4.1)	$ 9.3	12.0	9.1	1.0	31.5
Net Earnings (Loss) Per Share - Fully Diluted										
Continuing Operations	$ 0.42	0.45	(0.98)	0.75	0.64	$ 0.48	0.60	0.44	0.08	1.61
Discontinued Operations	(0.03)	(0.05)	(0.78)	0.00	(0.85)	(0.04)	(0.02)	0.01	(0.03)	(0.08)
Net Earnings (Loss) Per Share	$ 0.39	0.40	(1.76)	0.75	(0.21)	$ 0.44	0.58	0.45	0.05	1.53

Notes: Included in the 1990 results from operations is a third quarter after tax restructuring charge of $31.9 million for expenses related to the phasing out of certain product lines and other related expenses including employee terminations, facility consolidations, and asset revaluations.

The after tax charge for third quarter 1990 discontinued operations of $15.2 million ($.78 per share) was due to discontinuance of several non-core businesses, predominantly in the Electron Devices business. Prior period financial data has been restated.

Included in the fourth quarter 1989 results are after tax charges for anticipated legal expenses of $3.8 million in connection with an ongoing government investigation of the power-grid tube industry.

The four quarters for net earnings (loss) per share may not add for the year because of the different number of shares outstanding during the year.

COMMON STOCK PRICES (UNAUDITED)

	1990				1989			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Common Stock								
High	$25 7/8	26 1/4	29 1/8	34 3/4	$30 1/4	30 5/8	28 5/8	28 3/8
Low	$19 7/8	20	23 1/8	27 7/8	$25 1/2	25 3/4	23 1/2	23 1/2
Dividends Declared Per Share	$.065	.065	.065	.065	$.065	.065	.065	.065

SCHEDULE II

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
AMOUNTS RECEIVABLE FROM RELATED PARTIES AND UNDERWRITERS, PROMOTERS, AND EMPLOYEES OTHER THAN RELATED PARTIES (1)
for the fiscal years ended 1990, 1989 and 1988
(Dollars in Thousands)

Name of Debtor		Balance at Beginning of Period	Additions	Amounts Collected	Balance at End of Period Current	Balance at End of Period Noncurrent
FISCAL YEAR ENDED 1988:						
L. L. Hansen		$ 237	$ -	$ 41	$ 196	$ -
R. A. Lemos		106	-	21	11	74
T. D. Sege		187	-	18	49	120
V. Battaglia		-	152	152	-	-
		$ 530	$ 152	$ 232	$ 256	$ 194
FISCAL YEAR ENDED 1989:						
L. L. Hansen		$ 196	$ -	$ 196	$ -	$ -
R. A. Lemos		85	-	11	11	63
T. D. Sege		169	-	49	120	-
		$ 450	$ 0	$ 256	$ 131	$ 63
FISCAL YEAR ENDED 1990:						
J. T. O'Rourke	(2)	$ -	$ 1,260	$ -	$ -	$ 1,260
R. A. Lemos	(3)	74	-	11	11	52
T. D. Sege		120	-	120	-	-
		$ 194	$ 1,260	$ 131	$ 11	$ 1,312

(1) As to column omitted the answer is "none".

(2) The amount receivable is composed of two notes, each secured by a deed of trust on residential real property. One is for $700,000 and contains provisions for interest based on appreciation of the real property. The other is for $560,000 and is interest free. Both are payable upon termination of employment but may be converted to an 8%, 15 year note upon Mr. O'Rourke's retirement. The notes are payable upon sale of the real property, but the loans may be rolled over to assist in financing a different residence if Mr. O'Rourke is employed by the Company at the time.

(3) The amount receivable is supported by notes with interest rates of 6.75% and 7.04% due through 1992, with common stock of the Company pledged as collateral.

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES — SCHEDULE V

PROPERTY, PLANT, AND EQUIPMENT (1)

for the fiscal years ended 1990, 1989 and 1988

(Dollars in Millions)

Classification	Balance at Beginning of Period	Additions	Retirements	Other Changes (2)	Balance at End of Period
FISCAL YEAR ENDED 1988:					
Land and land leaseholds	$ 14.0	$ 0.3	$ (0.2)	$ -	$ 14.1
Buildings	155.4	8.3	(4.6)	(0.4)	158.7
Machinery and equipment	270.9	36.1	(21.8)	(0.1)	285.1
Construction in progress	18.3	3.5	-	(7.1)	14.7
Total	$ 458.6	$ 48.2	$ (26.6)	$ (7.6)	$ 472.6
FISCAL YEAR ENDED 1989:					
Land and land leaseholds	$ 14.1	$ 0.2	$ -	$ -	$ 14.3
Buildings	158.7	15.8	(1.0)	(1.2)	172.3
Machinery and equipment	285.1	27.1	(15.3)	4.3	301.2
Construction in progress	14.7	6.3	-	2.4	23.4
Total	$ 472.6	$ 49.4	$ (16.3)	$ 5.5	$ 511.2
FISCAL YEAR ENDED 1990:					
Land and land leaseholds	$ 14.3	$ -	$ (2.2)	$ (2.7)	$ 9.4
Buildings	172.3	8.1	(6.4)	(20.6)	153.4
Machinery and equipment	301.2	37.4	(19.1)	(39.6)	279.9
Construction in progress	23.4	7.6	-	(13.3)	17.7
Total	$ 511.2	$ 53.1	$ (27.7)	$ (76.2)	$ 460.4

(1) See accompanying notes to the consolidated financial statements.

(2) Capitalization of construction in progress, acquisitions and sales of businesses, and reclassifications for discontinued operations.

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION OF
PROPERTY, PLANT, AND EQUIPMENT (1)
for the fiscal years ended 1990, 1989 and 1988
(Dollars in Millions)

SCHEDULE VI

Description	Balance at Beginning of Period	Additions	Retirements	Other Changes (2)	Balance at End of Period
FISCAL YEAR ENDED 1988:					
Land and land leaseholds	$ 1.9	$ 0.4	$ -	$ -	$ 2.3
Buildings	54.0	8.0	(1.4)	0.9	61.5
Machinery and equipment	147.0	32.6	(13.9)	1.4	167.1
Total	$ 202.9	$ 41.0	$ (15.3)	$ 2.3	$ 230.9
FISCAL YEAR ENDED 1989:					
Land and land leaseholds	$ 2.3	$ 0.4	$ -	$ -	$ 2.7
Buildings	61.5	8.3	(0.7)	(1.3)	67.8
Machinery and equipment	167.1	32.0	(10.3)	(0.9)	187.9
Total	$ 230.9	$ 40.7	$ (11.0)	$ (2.2)	$ 258.4
FISCAL YEAR ENDED 1990:					
Land and land leaseholds	$ 2.7	$ 0.2	$ (0.4)	$ (0.8)	$ 1.7
Buildings	67.8	7.9	(3.5)	(6.3)	65.9
Machinery and equipment	187.9	29.8	(16.9)	(22.3)	178.5
Total	$ 258.4	$ 37.9	$ (20.8)	$ (29.4)	$ 246.1

(1) See accompanying notes to the consolidated financial statements.

(2) Capitalization of construction in progress, acquisitions and sales of businesses, and reclassifications for discontinued operations.

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
VALUATION AND QUALIFYING ACCOUNTS (1)
for the fiscal years ended 1990, 1989, and 1988
(Dollars in Thousands)

SCHEDULE VIII

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions Description	Deductions Amount	Balance at End of Period
ALLOWANCE FOR DOUBTFUL NOTES & ACCOUNTS RECEIVABLE:					
Fiscal Year Ended 1988	$ 1,788	$ 760	Write-offs & Adjustments	$ (511)	$ 2,037
Fiscal Year Ended 1989	$ 2,037	$ 433	Write-offs & Adjustments	$ (759)	$ 1,711
Fiscal Year Ended 1990	$ 1,711	$ 755	Write-offs & Adjustments	$ (614)	$ 1,852
ESTIMATED LIABILITY FOR PRODUCT WARRANTY:					
Fiscal Year Ended 1988	$ 23,586	$ 30,199	Actual Warranty Expenditures	$ (29,684)	$ 24,101
Fiscal Year Ended 1989	$ 24,101	$ 38,156	Actual Warranty Expenditures	$ (32,347)	$ 29,910
Fiscal Year Ended 1990	$ 29,910	$ 42,758	Actual Warranty Expenditures	$ (38,408)	$ 34,260

(1) As to column omitted the answer is "none".

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES Schedule IX

SHORT-TERM BORROWINGS

for the fiscal years ended 1990, 1989 and 1988

(Dollars in Millions)

Category of Aggregate Short-Term Borrowings	Balance at End of Period	Weighted Average Interest Rate	Maximum Amount Outstanding During Period	Average Amt. Outstanding During Period (2)	Weighted Average Interest Rate During Period (3)
Amounts payable to Banks, Factors, and Other Financial Institutions for Borrowings (1):					
Fiscal Year End 1988	$14.2	12.5%	$61.8	$43.0	9.5%
Fiscal Year End 1989	$53.7	9.4%	$91.6	$59.6	10.3%
Fiscal Year End 1990	$10.0	10.0%	$92.4	$61.0	8.8%

(1) At fiscal year end 1990, 1989, and 1988, the Company had total unused committed lines of credit amounting to $100 million, $170 million, and $100 million, respectively. Total borrowing is subject to limitations included in long-term debt agreements. No compensating balances were maintained in 1990, 1989, or 1988 under credit agreements in effect during these years.

Average [illegible]unts outstanding based on balances at the end of each of the 12 months in the fiscal year.

(3) Weighted average interest rates based on the balance and applicable interest rate for each amount payable at the end of each of the 12 months in the fiscal year.

SCHEDULE X

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
SUPPLEMENTARY INCOME STATEMENT INFORMATION
for the fiscal years ended 1990, 1989, and 1988
(Dollars in thousands)

Item	1990	1989	1988
Maintenance and repairs	$30,038	$29,980	$27,195
Depreciation expense	$37,917	$34,039	$33,752
Advertising costs	$ 9,761	$10,681	$10,579

Amounts for amortization of intangible assets and other deferrals, taxes other than payroll and income taxes and royalties are not presented as such amounts are less than 1% of total sales.

INDEX OF EXHIBITS

Exhibit Number		Location
3-a	Registrant's Restated Certificate of Incorporation, dated June 26, 1987: Exhibit incorporated by reference to registrant's Form 10-K for the year ended October 2, 1987, filed December 22, 1987.	
3-b	Registrant's Bylaws, dated November 16, 1990: Exhibit incorporated by reference to registrant's Form 8-K filed November 19, 1990.	
3-c	Registrant's Specimen Stock Certificate: Exhibit incorporated by reference to registrant's Form 8-K for the month of February, 1977, filed March 4, 1977.	
4	Registrant's Preferred Stock Purchase Rights dated August 26, 1986: Exhibit incorporated by reference to registrant's Form 8-A dated August 26, 1986, filed September 2, 1986, and amended by amendment no. 1 dated July 7, 1989.	
11	Computation of Earnings Per Share	Page 48
22	Subsidiaries of the Registrant	Page 49
24	Consent of Independent Accountants	Page 50
28	Agreement between Varian Associates, Inc. and the Department of Defense concerning termination of suspension of Continental Electronics and establishment of a continuing surveillance program: Exhibit incorporated by reference to registrant's Form 10-K for the year ended September 29, 1989, filed December 18, 1989.	

VARIAN ASSOCIATES, INC. AND SUBSIDIARY COMPANIES
COMPUTATION OF EARNINGS PER SHARE IN ACCORDANCE
WITH INTERPRETIVE RELEASE NO. 34-9083

EXHIBIT 11

(Shares in Thousands)	1990	1989	1988
Actual weighted average shares outstanding for the period	19,391.0	20,623.0	21,663.4
Dilutive employee stock options using average market price	14[illegible]	36.0	93.0
Total shares based on shares outstanding and the assumption that all stock options will be exercised at average stock market price	19,538.0	20,659.0	21,756.4
Additional dilutive employee stock options using ending market price	-	-	78.0
Total shares based on shares outstanding and the assumption that all stock options will be exercised at ending market price	19,538.0	20,659.0	21,834.4
(Dollars in millions, except per share amounts)			
Earnings from continuing operations	$ 12.6	$ 33.2	$ 34.5
Loss from discontinued operations	(16.7)	(1.7)	(6.7)
Net earnings (loss) applicable to fully diluted earnings per share	$ (4.1)	$ 31.5	$ 27.8
Earnings (loss) per share based on SEC interpretive release No. 34-9083:			
Earnings from continuing operations	$ 0.64	$ 1.61	$ 1.57
Loss from discontinued operations	(0.85)	(0.08)	(0.30)
Net earnings (loss) per share	$ (0.21)	$ 1.53	$ 1.27

VARIAN ASSOCIATES, INC. Exhibit 22

SUBSIDIARIES OF THE REGISTRANT

Fiscal 1990

	Organized Under Laws of	Percentage of Voting Securities Owned
Varian Associates, Inc. (Registrant)		
Subsidiaries:		
Analytichem International, Inc.	California	100%
Varian Associates Limited	California	100%
Varian Investment Corporation	California	100%
Varian Realty, Inc.	California	100%
Varian China, Ltd.	Delaware	100%
Varian Instruments, Ltd.	Delaware	100%
Varian Microwave Equipment, Ltd.	Delaware	100%
Varian Pacific, Inc.	Delaware	100%
Varian Instruments of Puerto Rico, Inc.	Delaware	100%
Varian U.K., Ltd.	Delaware	100%
Mansfield Insurance Company	Vermont	100%
Varian Australia Pty., Ltd.	Australia	100%
Varian Pty., Ltd.	Australia	100%
Varian Techtron Pty., Ltd.	Australia	100%
Varian GesmbH	Austria	100%
N.V. Varian Benelux S.A.	Belgium	100%
Varian Industria e Comercia Ltd.	Brazil	100%
Varian Canada, Inc.	Canada	100%
Varian Electronics ApS	Denmark	100%
Varian SA	France	100%
Varian GmbH	Germany	100%
Varian SpA	Italy	100%
Varian S.A.	Mexico	100%
Varian Espana S.A.	Spain	100%
Varian AB	Sweden	100%
Varian International AG	Switzerland	100%
Varian Nederland B.V.	The Netherlands	100%
Varian FSC B.V.	The Netherlands	100%
Varian - TEM Limited	United Kingdom	100%
Varian TVT Limited	United Kingdom	100%
Affiliates (not consolidated, included at equity):		
Varian - Korea, Ltd.	South Korea	61%
Tel-Varian, Ltd.	Japan	50%
Spectroscopy Imaging Systems Corp.	Delaware	50%
Varian - TEL, Ltd.	Delaware	50%
Varian Supply Co. (VASCO)	California	50%

All of the above subsidiaries are included in Varian's consolidated financial statements. The names of certain consolidated subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not consitute a significant subsidiary.

Coopers
&Lybrand

certified public accountants

Exhibit 24

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Prospectuses constituting part of the Registration Statements of Varian Associates, Inc. on Forms S-8 (Nos. 33-6661, 2-95139, 33-1425, 33-33660) of our report dated October 19, 1990, on our audits of the consolidated financial statements and the financial statement schedules of Varian Associates, Inc. as of September 28, 1990 and September 29, 1989 and for each of the three fiscal years in the period ended September 28, 1990, which report is included in this Annual Report on Form 10-K.

Coopers & Lybrand

COOPERS & LYBRAND

San Jose, California
December 17, 1990

030-10763

varian

December 21, 1990

MAILED CERTIFIED,
RETURN RECEIPT REQUIRED

U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Attn: Mr. Eric Reber

Re: Varian/Beverly Microwave Division
License No. 20-02237-04
Financial Assurance for Decommissioning

Dear Mr. Reber:

Further to my letter to you of November 29, 1990, please be advised that Varian is continuing in the process of preparing the parent company guarantee to satisfy the decommissioning financial responsibility requirements. The remaining information will be available next week however, our offices will be closed as of noon today through January 2, 1990. We will complete the documentation and submit the guarantee when business resumes in January.

Sincerely,

Arlyne Titus

Arlyne Titus
Insurance Analyst

(415)424-5357

cc: Jack McKinley

Varian Associates, Inc. 611 Hansen Way P. O. Box 10800 Palo Alto, California 94303-0883 U.S.A.
415/493-4000 FAX 415/493-0307 Telex 348476

113624

DEC 26 1990

030-10763

varian

November 29, 1990

MAILED CERTIFIED,
RETURN RECEIPT REQUIRED

U.S. Nuclear Regulatory Commission
Region One Office
475 Allendale Road
King of Prussia, PA 19406

Attn: Mr. Eric Reber

Re: Varian/Beverly Microwave Division
License No. 20-02237-04
Financial Assurance for Decommissioning

Dear Mr. Reber:

Please be advised that Varian Associates, Inc. is in the process of preparing a parent company guarantee based on the authorized financial test contained in Appendix A of 10 CFR Part 30 in order to satisfy decommissioning financial responsibility requirements associated with the captioned license.

Varian's latest completed fiscal year ended September 28, 1990. We are awaiting completion of the review of year-end financials by our independent auditors, Coopers & Lybrand, before being able to complete the financial test. We anticipate this information will be available in the very near future.

We expect to forward our guarantee to you before calendar year end. However, we will notify you and advise status if a delay is unavoidable. In the meantime, please feel free to contact the undersigned if you should have any questions.

Sincerely,

Arlyne Titus

Arlyne Titus
Insurance Analyst
(415)424-5357

113624

DEC 3 1990

cc: Jack McKinley

OFFICIAL RECORD COPY ML 10

03C 10763

varian

beverly microwave division

Memo JJM90:019

Re-Issue October 19, 1990

September 27, 1990

Log
Remitter
Check No.
Amount
Fee Category 3B
Type of Fee AMD
Date Check Rec'd.
Date Completed
By AC
FEE NOT REQUIRED
8/30/90 Memo

United States
Nuclear Regulartory Commision,
Region 1
475 Allendale Road
King of Prussia, PA 19406

Attention: Eric Reber

20-02237-04

Gentlemen:

This is to inform you that our parent company, *Varian Associates, Inc. of Palo Alto, CA is in possession of regulatory guide 3.66 and will address the financial assurance mechanism for decommissioing under 10 CFR part 30.

Sincerely,

John J. McKinley

John J. McKinley
Radiation Safety Officer

* Varian Associates is a Delaware corporation with principal offices located at 611 Hansen Ave., Palo Alto, CA 94303 telephone (415) 493-4000

113624

"OFFICIAL RECORD COPY" ML18

OCT 22 1990

150 Sohier Road, Beverly, MA 01915-5595 (508) 922-6000

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

PROGRAM CODE: 03214
STATUS CODE: 0
FEE CATEGORY: 3B
EXP. DATE: 19920229
FEE COMMENTS: ______

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
   APPLICANT/LICENSEE: VARIAN/BEVERLY MICROWAVE DIVISION
   RECEIVED DATE: 901022
   DOCKET NO: 3010753
   CONTROL NO.: 113524
   LICENSE NO.: 20-02237-04
   ACTION TYPE: AMENDMENT

2. FEE ATTACHED
   AMOUNT: ______
   CHECK NO.: ______

3. COMMENTS

SIGNED Trisha M Haverkamp
DATE 11/05/90

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /✓/)

1. FEE CATEGORY AND AMOUNT: 3B FEE NOT REQUIRED

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR: Per 8/30/90 Memo
   AMENDMENT ✓
   RENEWAL ______
   LICENSE ______

3. OTHER ______

SIGNED [illegible]
DATE [illegible]