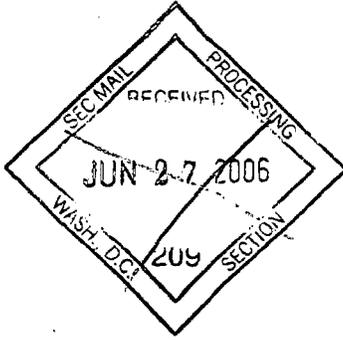
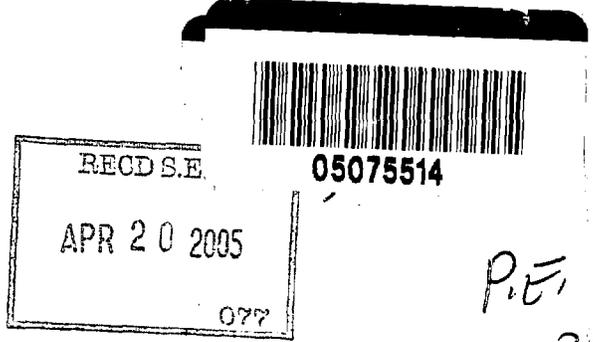


radync inc

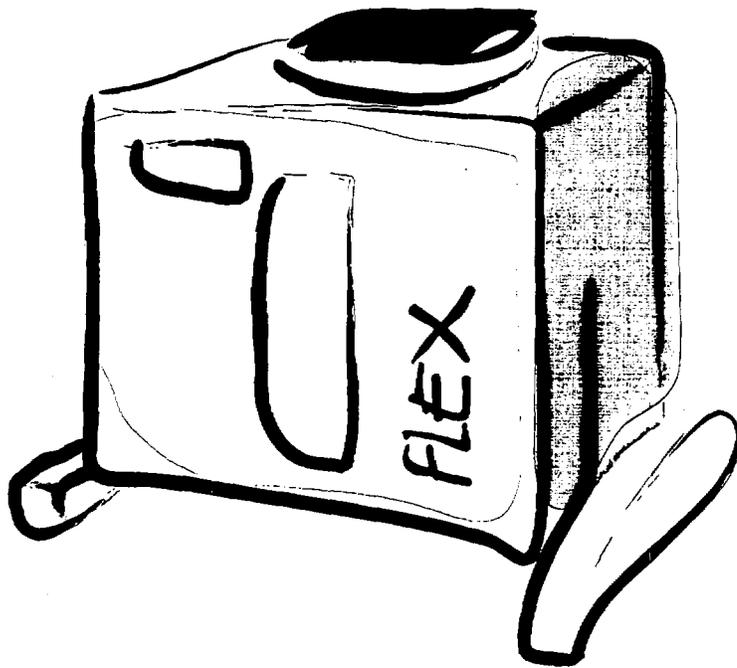
2004 annual report



*APL*



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THOMSON  
FINANCIAL

	2004	2003
Net Sales	\$ 1,791,880,000	\$ 1,352,867,000
Income/(Loss)		
Before Income Taxes	\$ 187,974,000	\$ (186,193,000)
Net Income/(Loss)	\$ 165,237,000	\$ (193,993,000)
Net Income/(Loss)		
Per Common Share - Basic	\$ 0.85	\$ (1.03)
Per Common Share - Diluted	\$ 0.84	\$ (1.03)

Teradyne is a leading supplier of Automatic Test Equipment, with products that test semiconductors, circuit boards and modules, voice and broadband networks and automotive electronics. As the technology leader in high-performance interconnection systems, Teradyne also provides a broad range of products and services, including high-speed, high-density connectors and backplane assemblies.

Teradyne sells and services its products primarily through a direct worldwide sales, applications and support organization, with technical centers located throughout the United States, Asia and Europe.

The Company was founded in 1960 and became publicly owned in 1970. Its stock is traded on the New York Stock Exchange under the symbol TER. For more information, visit [www.teradyne.com](http://www.teradyne.com).

Teradyne: Because Technology Never Stops

*to our shareholders*

Last year a rainbow graced the cover of our Annual Report, implying that the recent storms had passed and that better weather lay ahead. It was a good call. Sales in 2004 grew by 32 percent, to \$1.79 billion, and the bottom line swung from a loss of \$194 million to a profit of \$165 million. Using any of the usual standards — growth, profitability, financial health, market share — 2004 was a year of solid achievement.

All our business units contributed significantly to our success, and I will review their individual contributions later in this letter. First, though, I would like to offer a few personal comments.

Last May I became the fourth CEO in Teradyne's 44-year history. My predecessors – Nick DeWolf, Alex d'Arbeloff, and George Chamillard – built a Company known throughout the world for technological innovation, quality products, and business integrity. The past year has given me a heightened appreciation of the DNA that gives Teradyne its unique personality – one that is hard to describe but easily recognized by our employees and our customers. With this in mind, and with the solid results of 2004 as background, here are some of my thoughts on where we are going and how we will get there.

### **First Things First**

Our core business, and our top priority, remains semiconductor testing, as it has been ever since the Company launched its first product, a revolutionary diode tester, in 1961. In the years since, each generation of testers has steadily advanced on the critical axes of performance and productivity. Because of our technological contributions on both fronts, over \$14 billion worth of Teradyne test systems have been installed on the production lines of the world's semiconductor industry. We believe that without Teradyne, the semiconductor industry could not have prospered as it has, nor could consumers have enjoyed the benefits of ever more powerful devices at ever lower prices.

Our latest chip-tester is the FLEX™ system, whose architecture spans the full range of system-on-a-chip (SOC) technologies and whose powerful parallel-test economics gives the \$150 billion SOC market a major boost in productivity. A breakthrough product like FLEX deserves all the reinforcement we can give it. At the top of my agenda, therefore, is the full exploitation of FLEX to capture a growing share of the world semiconductor test market.

### **Volatility as a Way of Life**

In our core business, the cycles are getting shorter. Over most of our history, the semiconductor capital equipment cycle consisted of three or four strong years followed by a down year. The down years came right on schedule: 1971, 1975, 1981, 1985, etc. Then, in the late 1990s, the ultimate four-year sales burst was followed by the ultimate collapse.

It is dangerous to say that any pattern will never be repeated, but I believe that, for the foreseeable future, the semiconductor industry will not let capacity and inventories grow unchecked for very long. Armed with better management information systems and traumatized by the excesses of the past, our customers now throttle back as soon as they sense a gathering imbalance. Of course, that

means that the imbalance soon vanishes, and they again throttle forward. Thus a capital equipment cycle that used to last a few years may now last only a few quarters, as we saw in 2004. Volatility, then, is a way of life in our business, and we continue to structure the Company to generate profits over the cycle - whatever its duration.

### Unleashing the Power of Teradyne

Managing volatility also means shortening the cycle time for everything we do. In talking with our employees, I have been using the phrase, "Unleashing the power of Teradyne." The message implies two things: First, that a reservoir of initiative, talent, and ambition lies untapped within our walls. And indeed, we do have extraordinary "bench strength" and plenty of drive in reserve. Second, it implies that something has been holding us back, making us more conservative than we should be at times when initiative, risk-taking, and speed make the difference. "Unleashing the power of Teradyne" is a call to all our business units to respond to our customers with a heightened sense of urgency.

### Asia

Asia accounted for 53 percent of our total sales in 2004, compared with 45 percent in 2003 and 34 percent in 2002. The trend is clear. Taiwan, Singapore, Thailand, Malaysia, Japan, and Korea are now home to thousands of Teradyne test systems. Then, of course, there is China, whose fast-growing economy and abundant supply of skilled workers are rapidly creating a high-tech powerhouse.

We are not a come-lately in Asia, having "gone direct" in Japan in the early 1970s and having operated for decades in that part of the world. Today we sell and support semiconductor testers, board testers, and backplane systems throughout the region. In addition, our supply line encompasses Asian subcontractors, and our highest-volume product, the J750, is shipped from our Shanghai factory.

Asia will likely remain our fastest growing market for years to come, and our future success depends heavily on the continued expansion of our presence in that area. Last year we opened an Applications Development Center in Shanghai, staffed by some 35 recent graduates of Chinese universities, most with advanced degrees (and all fluent in English). In Taiwan, meanwhile, we are building another engineering team, this one dedicated to



*Shanghai*

the process of integrating semiconductor test systems with handlers, probers, and other components of the typical test cell. We expect to continue strengthening our Asian support staffs in the years ahead.

These, then, are some of my priorities as Teradyne's new CEO: Gain share in the semiconductor test market, manage volatility to deliver healthy profits over the business cycle, ensure that the Company is fast on its feet, and continue to invest in Asia. That's not a complete list, of course, but it will do for openers.

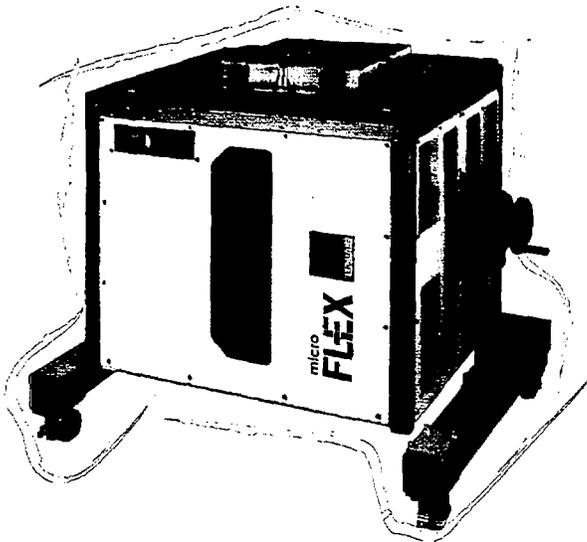
Now, to a detailed review of the highlights of 2004:

### Semiconductor Test Systems

The engine responsible for most of our success in 2004 was our Semiconductor Test Division, whose sales, which had grown by 32 percent in 2003, grew by a further 56 percent in 2004, with our share of the SOC market climbing by about five percentage points. Three products represent the bulk of our semiconductor test sales. The Catalyst™ line, including the high-end Tiger™ system, remains the SOC tester of choice for many of the world's semiconductor companies and their subcontractors. With an installed base of more than 1600 systems, and with thousands of devices already tooled for this system, Catalyst is sure to be a fixture on test floors world-wide for many years to come.

The J750 line, now with an installed base of over 1750 systems, continues to capture a growing share of the market for lower-cost SOC testers, especially in wafer-probe applications. Most J750s wind up on test floors in Asia, so we make them there and support them there. The chips in your automobile or cell phone or digital camera may well have been tested on a J750.

The star in our semiconductor test universe is the new FLEX system. You may recall that a year ago we expressed optimism that a handful of early FLEX orders foreshadowed a successful 2004. In fact, FLEX bookings surged



*microFLEX*

from 34 systems in 2003 to more than 200 in 2004. More important, these systems were bought by 10 of the 15 largest integrated device manufacturers (IDMs), every one of the 10 largest semiconductor subcontractors, and five of the 10 largest fabless semiconductor companies. This is the kind of market acceptance tester makers dream of but rarely achieve.

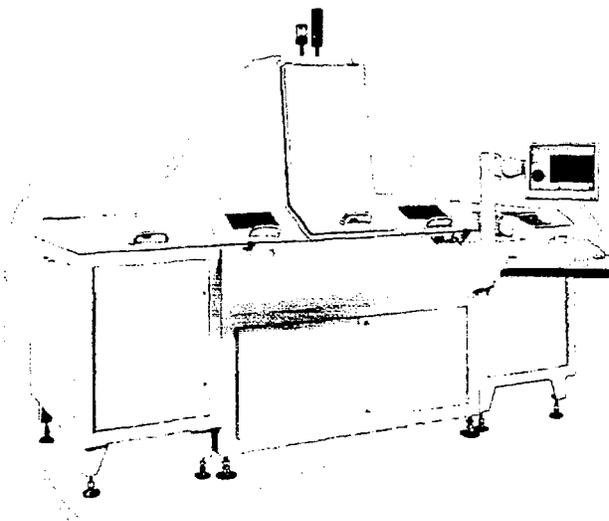
FLEX owes its success to the fact that it is designed from the ground up as an affordable, highly parallel SOC tester. (Parallelism refers to the ability to test multiple devices simultaneously.) Its open architecture means that a wide range of instruments can be plugged into slots in the mainframe – instruments designed by our engineers, our customers' engineers, or third parties. The FLEX story gathered steam throughout the year, both at our customers' plants and in our own factory, where each FLEX system is now assembled, tested, and shipped in a matter of days.

### **Assembly and Automotive Test Systems**

After several rough years, our board test business turned the corner in 2004. Sales were up 13 percent over 2003 (not counting discontinued products), and our market share grew. The key factors in the upturn were the per-pin flexibility of our TestStation™ system, the low-voltage capability of our SafeTest™ technology, the market's geographic shift to China and Taiwan, where we have strong positions, and the computer industry's shift from desk-top to lap-top models, creating a new level of testing complexity we are well equipped to address.

The military/aerospace segment, a steady contributor to our top and bottom lines for many years, grew again in 2004, on the strength of legacy products for programs such as the Navy's CASS and the Army's IFTI programs, and a new generation of systems intended to standardize automated testing across all branches of the U.S. military. We are also migrating from the factory and the depot to the battlefield with new "O" (for operational) level testers. One of these systems combines software technology developed by our automotive test division (see below) with our bus test instrument (BTI) to create a portable tester ready to go where the action is. (Think of an aircraft on the deck of a carrier, and a quick, plug-in test of its electronic systems.)

One of our most exciting new fields is x-ray board testing, a fast-growing market that allows users to inspect solder joints that are inaccessible by electrical testers and invisible to optical testers. Our new XStation MX™ x-ray test system uses a technology known as off-center tomosynthesis to deliver fast, high-resolution images. We expect to start shipping these new systems early in 2005.



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Our automotive test unit, the UK-based Diagnostic Solutions, completed its third straight year in the black. Although sales were 14 percent below the 2003 level, the Division scored noteworthy gains in all its product areas.

VCATS™ (Vehicle Configuration and Test System) sales increased by about 20 percent. A major Japanese manufacturer adopted the system, as did four "Tier 1" suppliers in Europe. The term applies to the largest subcontractors selling major subassemblies to the automobile manufacturers.

The fourth generation of our software platform, called GRADE-X™, continues to penetrate new accounts. The Java-based GRADE-X platform allows users to disseminate critical vehicle-specific information to the production line or the service bay. Symptom-based diagnostic capabilities offer manufacturers the prospect of significantly reduced warranty-related costs.

In recent years we have shipped thousands of service testers to Honda and Acura dealerships, where they are used to test and diagnose the electronic systems in automobiles, trucks, motorcycles, and marine engines. Now, for the first time, similar test and diagnostic technology is available to the automotive aftermarket (e.g., your neighborhood independent garage). The Teradyne Pocket Tester™ diagnostic tool, currently available only in the United States, is fully described on its own web site ([www.teradyne-pocket-tester.com](http://www.teradyne-pocket-tester.com)).

### Connection Systems

At Connection Systems, sales of continuing products increased by 24 percent, as the Division gained market share and as manufacturers of communications equipment, data storage systems, routers, and servers stepped up their purchases of our backplane systems and high-speed backplane connectors.

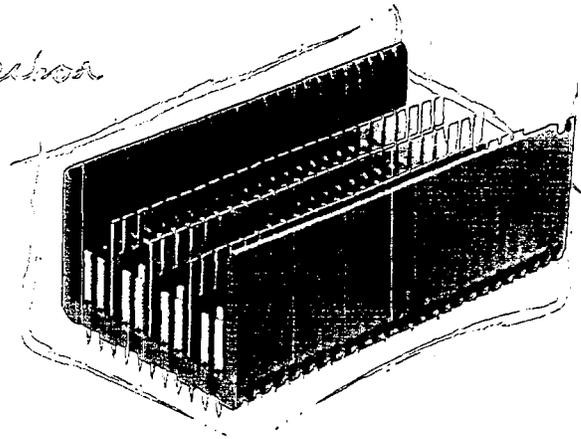
The backplane, which may be thought of as the switchboard in an electronic system, has been Connection Systems' core product for over 30 years. Today we produce not only complete backplane systems but also a wide range of connectors designed to carry high-speed signals to and from the backplane. Of these connectors, our VHDM® and VHDM-HSD™ families top the list, generating well over \$100 million in 2004 sales. Our fastest growing product was the NexLev® connector, designed to interconnect two paralleled circuit boards. Our GbX® connector also recorded strong growth, doubling sales for the year. More important, the number of design wins, an all-important predictor of future growth, increased by 32 percent, with NexLev and VHDM finding their way into more than 100 of our customers' new products. Capturing its first design win was our HD-Optyx™ optical connector, which is fully compatible with our electrical connectors and which offers higher contact density than is found on competitive connectors.

Reflecting the profiles of the markets we serve, our sales tend to be concentrated among a handful of very large companies. We are of course happy to be counted as a trusted supplier to these customers, but we are also anxious to broaden our customer base, so we carefully monitor the sales to companies outside our "top 10." In 2004, these sales grew by more than 65 percent. Today, our active customer base includes about 300 companies.

Our large and growing staff in China captured several major new accounts and design wins in 2004, notably including a decision by Chinese telecommunications giant Huawei-3Com to design our GbX connector into its next generation of routers.

Now the market leader in high-speed backplane connectors and the runner-up in the backplane systems market, Connection Systems will continue to play a central role in the growing market for data and communications systems. Moreover, the ongoing trend to distribute intelligence and memory over wider networks multiplies the number of hardware nodes required – each with its own backplane and its own heavy content of high-speed connectors.

*GbX connector*



## Broadband Test

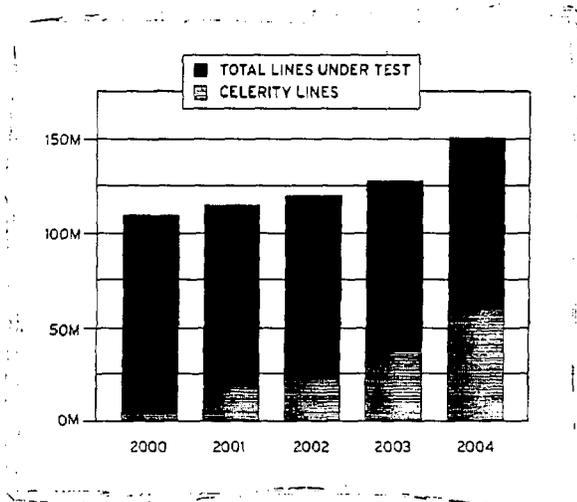
Broadband Test sales were up 55 percent over the prior year. Surging customer demand for DSL service and a technically superior Teradyne product were the two primary forces underlying our outstanding performance.

Not long ago, broadband internet service was regarded as a luxury. Today, as telephone users routinely e-mail photographs, download software upgrades, and transmit large text and data files, speed has become all-important. In the telecommunications context, speed means DSL (digital subscriber loop) service.

Not all telephone lines are DSL-capable, however, and this fact creates a need for a line qualifier such as Teradyne's Celerity® test system. Celerity enables the telephone company to identify those lines fast enough to support DSL service, with an accuracy an order of magnitude greater than that of alternative approaches. In the 18 months ending in December, 2004, the number of lines equipped with Celerity doubled, to 60 million. Of special note are major orders from Verizon, which is now in the process of equipping more than 1400 of its central offices with Celerity.

Our large installed base of line testers (now serving about 150 million lines) constitutes a significant market opportunity. To improve the service dispatch accuracy of these systems, we sell the LDU-100 Digital Test Unit (15,000 shipped, including 5500 last year). Once the LDU-100 hardware is in place, Celerity can then be added as a DSL qualifier. This layering of new products onto the installed base

continues throughout the world: The LDU-100 is now installed in the United States, Germany, the Netherlands, Hungary, Argentina, the Dominican Republic, and the Czech Republic. That leaves tens of millions of lines yet to upgrade. At the other extreme, British Telecom has run the table, with all 29 million of its lines now equipped with Celerity.



*Lines under test*

It is with great sadness that I report the death of John Mulroney, a Teradyne Director for 21 years. John, a former President of Rohm and Haas, was a wise and gentle man, whose keen business instincts and affability endeared him to his colleagues. He was also a man of far-ranging interests, and in recent years he was President of the Opera Company of Philadelphia. We miss him.

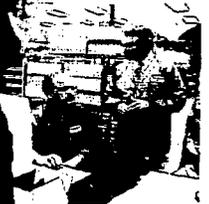
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We recognize that our customers, employees, and investors have been riding a roller coaster lately, as the computer, telecommunications, and consumer electronics businesses all seem to be in a mad dash to redefine and satisfy consumer appetites. Huge bets are being placed on outcomes impossible to predict. Who knows what combination of technologies will be in tomorrow's telephones, or tomorrow's TV sets, or tomorrow's computers? As if that weren't enough, geopolitical risks raise the overall level of uncertainty. In such a climate, it is easy to become absorbed by day-to-day events, ignoring longer-term objectives. That can be fatal, for decisions based on today's headlines are likely to be bad decisions.

We have our eyes and our business strategy focused, not on next week or next quarter, but on our vision of what we can achieve over the next five or ten years. It is a vision based on the premise that, whatever the course of technology, it will be semiconductor-based, and it will require testing. It is a vision rich in promise, and it inspires and energizes all of us every day.



Michael Bradley  
President and Chief Executive Officer



# directors & officers

## Board of Directors

James W. Bagley  
Chairman and Chief Executive Officer  
Lam Research Corporation

Michael A. Bradley  
Chief Executive Officer and President  
Teradyne, Inc.

Albert Carnesale  
Chancellor  
University of California Los Angeles

George W. Chamillard  
Chairman  
Teradyne, Inc.

Vincent M. O'Reilly  
Distinguished Senior Lecturer  
Boston College

Roy A. Vallee  
Chairman and Chief Executive Officer  
Avnet, Inc.

Patricia S. Wolpert  
Owner  
Wolpert Consulting, LLC

## Auditors

PricewaterhouseCoopers LLP

## Officers

Michael A. Bradley  
Chief Executive Officer and President

Gregory R. Beecher  
Vice President  
Chief Financial Officer and Treasurer

Eileen Casal  
Vice President  
General Counsel and Secretary

John M. Casey  
Senior Vice President

Jeffrey R. Hotchkiss  
President  
Assembly Test Division

Mark E. Jagiela  
President  
Semiconductor Test Division

G. Richard MacDonald  
Controller

Edward Rogas, Jr.  
Senior Vice President

Richard E. Schneider  
President  
Connection Systems Division

## Vice Presidents

Frank H. Carroccia  
George F. Cary III  
Robert S. Copithorne  
Loren G. Eaton  
Douglas H. Elder  
James A. Federico  
Thomas W. Felding  
Donald J. Hamman  
Marc S. Levine  
Wayne A. Morrison  
Bradford T. Nelson  
Thomas B. Newman, Jr.  
Stuart M. Osattin  
Thomas C. Pitten  
Thomas A. Pursch  
Bradford D. Robbins  
Roger S. Saylor  
Randy S. Stone  
Joseph F. Wrinn

## *Locations*

### **Corporate Headquarters**

321 Harrison Avenue  
Boston, Massachusetts 02118

### **Broadband Test**

Deerfield, Illinois  
Antwerp, Belgium  
Bracknell, United Kingdom  
Wuppertal, Germany

### **Circuit Board & Automotive Test**

North Reading, Massachusetts  
Antwerp, Belgium  
Detroit, Michigan  
Ismaning, Germany  
Shanghai, China  
Stockport, United Kingdom  
Tokyo, Japan

### **Connection Systems**

Nashua, New Hampshire  
Dublin, Ireland  
Mexicali, Mexico  
Penang, Malaysia  
San Jose, California  
Shanghai, China  
Winston Salem, North Carolina

### **Semiconductor Test**

Boston, Massachusetts  
Agoura Hills, California  
Fridley, Minnesota  
Kumamoto, Japan  
Munich, Germany  
North Reading, Massachusetts  
San Jose, California  
Shanghai, China  
Tualatin, Oregon  
Waltham, Massachusetts  
Woburn, Massachusetts

In addition to the locations listed here, the company maintains an extensive network of sales offices and service centers throughout North America, Asia, and Europe.



## Information for Shareholders

Shareholders and others may access Teradyne's latest earnings reports and other press releases at its web site, [www.teradyne.com](http://www.teradyne.com), by clicking on the "Archived News" link in the "In the News" section, or by accessing Business Wire at [www.businesswire.com/ter/index.shtml](http://www.businesswire.com/ter/index.shtml).

Financial information and Teradyne's SEC filings are also available on the Internet, either through Teradyne's home page or through the SEC's EDGAR archives. The addresses are:

- Teradyne: <http://www.teradyne.com>. Click on the "Investors" link and then the SEC filings link.
- EDGAR: <http://www.sec.gov/cgi-bin/srch-edgar> (keyword response: Teradyne)

The Company's Ethics Policy, Corporate Governance Guidelines and Charters for its Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are available on Teradyne's website at [www.teradyne.com](http://www.teradyne.com) by clicking on the "Investors" link and then the "Corporate Governance" link. Each of these documents is also available in print to any shareholder who submits a request to Teradyne's investor relations department at:

- Investor Relations: (617) 422-2425
- [investorrelations@teradyne.com](mailto:investorrelations@teradyne.com)

Shareholders seeking information on stock transfers, lost certificates, etc., should call or write Teradyne's Transfer Agent:

- EquiServe Trust Company, N.A.  
P.O. Box 43023  
Providence, RI 02940-3023
- Equiserve Investor Relations: (781) 575-4593
- Internet: <http://www.equiserve.com>

The attached Form 10K does not include all Exhibits filed with the SEC. These Exhibits, along with additional copies of our Form 10K, are available from us without charge upon request. Please contact: Thomas Newman, Vice President of Corporate Relations, Teradyne, Inc., 321 Harrison Avenue, Boston, MA 02118, or [investorrelations@teradyne.com](mailto:investorrelations@teradyne.com).

## Important Factors Regarding Future Results

Information provided by Teradyne, including information contained in this Annual Report, may contain "forward looking statements" as defined under Section 21E of the Securities Exchange Act of 1934, which are based on the assumptions and expectations of the Teradyne's management at the time such statements are made. These statements are not promises, guarantees, or assurances that projected results will be achieved but involve risks and uncertainties, both known and unknown, that could cause the Company's actual results to differ materially from those projected in any forward looking statements. These forward looking statements may include statements regarding our revenue, earnings, profit and loss expectations, order growth, future business strategies and market opportunities, technological innovation and trends, improvements in our business, our capital requirements, demand for our products, product development and distribution, geographic shifts in our business and operations, changes in our business cycle and general economic outlook. Important factors that could cause actual results to differ materially from those presently projected include: adverse changes in general economic or market conditions, including market demand for electronics and downturns in the semiconductor industry; reductions or delays in capital investment by our customers; the decision by customers to cancel or defer previously accepted orders; reduced bookings; the "hockey-stick" pattern of sales resulting from a disproportionately large percentage of total quarterly sales occurring in the last month and weeks of each quarter; the historically cyclical nature and volatility of the markets that Teradyne serves; war or threat of terrorist attacks; technological and market changes; disruptions or delays in Teradyne's supply chain; Teradyne's ability to protect its intellectual property; new product development introductions and transitions and any delays; uncertainty of customer acceptance of new product offerings including the timing, price and mix of new product acceptance; competitive pressures including new products, pricing and gross margin pressures; the effectiveness of our implementation of cost cutting and expense control measures, including facility consolidations, employee reductions, the centralization of certain shared services, seeking lower prices from suppliers and the outsourcing of selected manufacturing and engineering activities; insufficient, excess or obsolete inventory; disruptions, delays and shortages in raw materials and component availability; internal and external manufacturing capability, and raw material and component quality; the impact of and our ability to manage the effects of past or future acquisitions or divestitures; any material litigation brought against the Company; our debt service obligations and debt to capital ratio resulting from our issuance of \$400 million aggregate principal amount of senior convertible notes in 2001; Teradyne's obligations in the event of a change of control; the availability of additional financing; the impact of being required to account for stock options as an expense; Teradyne's ability to attract and retain key employees; the inability of Teradyne's suppliers to meet product or delivery requirements; the impact of ensuring compliance with evolving environmental regulations such as the European RoHS and WEEE directives; risks of potential environmental liability; risks of operating internationally which include political and economic instability, unexpected changes in legal and regulatory requirements and other events and factors previously and from time to time disclosed in the Company's filings with the Securities and Exchange Commission.

## Annual Meeting

May 26, 2005, 10:00 A.M.  
100 Federal Street, Boston, Massachusetts

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 10-K**

(MARK ONE)

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

For the fiscal year ended December 31, 2004

OR

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

Commission file number 1-6462

**TERADYNE, INC.**

(Exact Name of Registrant as Specified in Its Charter)

MASSACHUSETTS  
(State or Other Jurisdiction of  
Incorporation or Organization)

04-2272148  
(I.R.S. Employer  
Identification Number)

321 HARRISON AVENUE,  
BOSTON, MASSACHUSETTS  
(Address of Principal Executive Offices)

02118  
(Zip Code)

Registrant's telephone number, including area code: (617) 482-2700

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, par value \$0.125 per share	New York Stock Exchange
Common Stock Purchase Rights	New York Stock Exchange

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  No

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12(b-2)).  
Yes  No

The aggregate market value of the voting stock held by nonaffiliates of the registrant as of July 4, 2004 was \$4.1 billion based upon the composite closing price of the registrant's Common Stock on the New York Stock Exchange on that date.

The number of shares outstanding of the registrant's only class of Common Stock as of February 28, 2005 was 195,625,134 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's proxy statement in connection with its 2005 annual meeting of shareholders are incorporated by reference into Part III.

TERADYNE, INC.

FORM 10-K

PART I

**Item 1: Business**

Teradyne, Inc. is a leading supplier of automatic test equipment and a leading provider of high performance interconnection systems.

Teradyne® automatic test equipment products include systems that:

- test semiconductors ("Semiconductor Test Systems");
- test and inspect circuit-boards ("Assembly Test Systems");
- diagnose, program and test automotive electronics systems ("Diagnostic Solutions"); and
- test voice and broadband access networks ("Broadband Test Systems").

Teradyne interconnection systems products and services ("Connection Systems") include:

- high bandwidth backplane assemblies; and
- high density connectors.

Broadband Test Systems and Diagnostic Solutions have been combined into "Other Test Systems" for purposes of Teradyne's segment reporting. For financial information concerning Teradyne's reportable segments and geographical data, see "Note T: Operating Segment and Geographic Information" in Notes to Consolidated Financial Statements.

Statements in this Annual Report on Form 10-K which are not historical facts, so called "forward looking statements," are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934. Investors are cautioned that all forward looking statements involve risks and uncertainties, including those detailed in Teradyne's filings with the Securities and Exchange Commission. See also "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations—Certain Factors That May Affect Future Results" and "Note D: Risks and Uncertainties" in Notes to Consolidated Financial Statements.

**Products**

***Semiconductor Test Systems***

Teradyne produces Semiconductor Test Systems which test a wide variety of "system on a chip" ("SOC") semiconductor devices during the manufacturing process. These devices contain integrated analog, digital and memory functions which allow an entire system or subsystem to reside on a single device or "chip." These chips are used in automotive, communications, consumer, computer and electronic game applications, among others. Semiconductor Test Systems are sold to Integrated Device Manufacturers ("IDMs"), Fabless companies and to Foundries and subcontractors ("Subcons"). Subcons provide test and assembly services for the final packaged devices to both Fabless companies and IDMs. Fabless companies perform the design of integrated circuits without manufacturing capabilities, and use Foundries for wafer manufacturing and Subcons for test and assembly. These customers obtain the overall benefit of comprehensively testing advanced performance devices while reducing their total costs associated with testing by using Teradyne's Semiconductor Test Systems to:

- measure and improve product performance;
- improve and control product quality;
- reduce time to market; and
- increase production yields.

The systems work in both wafer probe test and final package test applications.

SOC devices span a huge range of functionality, from very simple low-cost devices such as operational amplifiers or voltage regulators to complex digital signal processors and microprocessors. Teradyne offers a suite of test solutions to cover this range in the most economical way for each segment. The main test equipment products are described below:

The J750 test system is designed to address the highest volume semiconductor devices. Devices such as microcontrollers are at the heart of almost every consumer electronics product, from small appliances to automotive engine controllers. These devices are produced in enormous quantities. The lowest cost of test at very high production throughput rates is essential to meeting the economic requirements in these markets. Teradyne's J750 test systems combine compact packaging, high throughput and ease of production test. These benefits are possible due to the high level of integration in the design. A single circuit board in the J750 test system provides up to 64 digital input/output channels. This innovative approach eliminated the traditional "mainframe," creating a "tester in the test head," or "zero footprint design." This approach allows the test system to be placed directly on top of a wafer prober, without the need for any floor space for the tester itself. The J750 has been met with success in the marketplace, and has an installed base of over 1,900 systems. The J750 platform technology also has been used to create Teradyne's IP750 Image Sensor test system. The IP750 is focused on testing image sensor devices used in digital cameras and other imaging products.

The Catalyst™ and Catalyst-Tiger test systems are designed to test a broad range of higher performance SOC devices. The Catalyst is designed to test devices requiring data rates up to 400 Mega bits per second ("bps") with a broad range of analog performance. Over 1,400 Catalyst systems are in use today at IDMs and Subcons testing integrated circuits for DVD players, wireless cellular phones, networking appliances, telecommunications systems, computer peripherals, and many other applications.

The "Tiger™" version of Catalyst provides similar analog capability, but extends the digital performance up to 3.2 Giga bps on up to 1,264 input/output channels. This extended digital performance enables complete functional testing of the world's most demanding SOC and high-speed logic integrated circuits used in computer graphics, personal computer chip set, microprocessor, and networking applications. Over 100 Tiger systems are installed at IDMs and Subcons around the world.

Teradyne's most recently introduced test system, the FLEX™ test system, is the beginning of the next generation of high throughput general purpose SOC test systems, and has been expanded with the addition of the MicroFLEX™ test system. The FLEX architecture combines the integration and parallelism of the J750 with the synchronization and instrument flexibility of the Catalyst. FLEX employs a unique "SOC tester per pin" concept bringing a higher degree of parallelism to mixed signal and SOC testing. By testing more functions and more devices at the same time ("in parallel") FLEX increases the production efficiency of SOC device testing. The core of FLEX design employs a "universal slot" concept, which provides the user the flexibility to install any instrument into any of the tester "slots." FLEX is similar to the J750 in that the instrumentation tends to be implemented on self contained circuit boards that plug into the test head. This modular design and the universal slot architecture adds a level of adaptability and flexibility to production testing which is new to the industry. FLEX currently tests a range of devices in the consumer electronics area, including automotive, higher performance microcontrollers, power control, and wireless applications. FLEX will be expanded to cover the complete non-memory device spectrum as high performance analog and digital instrumentation is added to the platform. The system is also designed with an open-architecture, which allows customers and third party companies to add test capability to the system. The MicroFLEX is a smaller footprint version of the FLEX, fully compatible, and supporting half as many instruments in a smaller cabinet. Like the J750, the MicroFLEX can be positioned directly on top of a wafer prober, providing "zero footprint" testing at wafer probe.

### *Connection Systems*

Connection Systems is a leader in high-performance connection systems, designing and manufacturing backplane systems, printed circuit boards and the industry's leading high-speed, high-density connectors.

Connection Systems helps Original Equipment Manufacturers ("OEMs") solve system design challenges with integrated interconnect solutions for application in the networking, communications, storage, computer server, and military/aerospace markets. Connection Systems' technology can be found in such products as Internet routers, computer servers, mass data storage systems, telecommunication switches, radar systems and other defense applications.

Leading connector technology, advanced printed circuit board fabrication capabilities and decades of backplane assembly expertise gives Connection Systems unique knowledge and experience with the entire signal transmission path. Teradyne believes this experience enables Connection Systems to differentiate itself in the market by providing integrated solutions for backplane systems. Connection Systems' engineers are involved early in their customers' product design process to help them get to market quickly with the optimum solution for price and performance. Engineering support, manufacturing and program management is available worldwide at Connection Systems' locations in Asia, Europe and North America to support both new product introductions and full-scale volume production.

Connection Systems' products and services include a broad range of high-speed, high-density connectors covering multiple applications within a single system. A suite of backplane connectors, including the industry-leading VHDM-HSD™ and VHDM® and the recently introduced GbX® connectors are utilized for traditional right-angle interface of printed circuit boards with high bandwidth requirements. For parallel connection of printed circuit boards, Connection Systems offers NeXLev®, VHDM Stacker, and HDM® Stacker connectors. These products allow designers to relocate high pin count devices onto mezzanine cards to simplify board routing and optimize system cost and performance. In 2003, Connection Systems introduced the industry's first modular optical interconnect, the HD-Optyx™ connector. In addition, Connection Systems works with customers to develop custom products for specific applications.

Connection Systems' printed circuit board capabilities are among the industry's most advanced, employing innovative solutions, such as improving routing to remove layers, or back drilling and blind or buried vias to produce enhanced signal quality and/or lower cost. Connection Systems was the first printed circuit board facility to be qualified to the military specification MIL-PRF-310321A/2 and has delivered boards for mission critical defense applications since 1982.

### *Assembly Test Systems*

The functionality of nearly every electronic product is generated by one or more printed circuit boards (PCBs), each of which contain complex components. Cell phones and laptop computers contain single-board assemblies, while more complex Internet switches and military avionics systems usually comprise multi-board assemblies. As more and more functionality is packed into these systems, the manufacturing and assembly processes become more complex. This intensifies the need for fast, accurate and reliable test and inspection systems. Teradyne's PCB assembly test equipment is commonly used in the production process to maintain high yields, ensure product quality, diagnose faults and reduce manufacturing cost. The company's functional test equipment is used to verify proper operation of both single- and multi-board assemblies at the end of the manufacturing cycle, and later in the maintenance and repair cycle. The Teradyne assembly test product range includes the following:

#### *In-Circuit Test Systems*

In-circuit test systems examine the assembled and soldered printed circuit board for proper construction under both power-off and power-on conditions. Defective components and solder joints are identified quickly and precisely. Fast, low-cost fault identification and accurate diagnostic capabilities are valued features of Teradyne's in-circuit testers, which cause them to be used by global electronics manufacturers. Teradyne's in-circuit products support a full range of PCB test applications, including high-volume production, selective or sample test, prototype testing and final or system test. Accordingly, Teradyne offers a variety of features and

options with its TestStation™ and Spectrum 8000-series products. The most recent option added to Teradyne's TestStation family is the SafeTest™ product. This technology allows users to test the new low-voltage components commonly found on low power PCBs for portable systems and battery operated instrumentation. SafeTest™ has helped improve the company's market share of testers sold to manufacturers of consumer and commercial goods.

#### *Imaging Inspection Systems*

As circuit boards grow more complex, achieving the electrical contact that traditional in-circuit testers require is more difficult, time-consuming and expensive. The "loss of (electrical and visual) access" and the move to lead-free manufacturing are contributing to the demand for advanced x-ray imaging inspection systems. Teradyne's automated x-ray inspection (AXI) systems are used to examine PCBs for manufacturing defects. Solder integrity problems are the most common; however these new systems can automatically detect improper component placement and orientation, electrical opens and shorts and a host of other board quality issues. Teradyne's XStation products are the most widely used test platforms among major automotive manufacturers worldwide.

#### *Military/Aerospace Test Systems & Instrumentation*

Teradyne's expertise in the functional test and diagnosis of complex PCBs is valuable to the more demanding military and commercial aerospace markets. Teradyne's test solutions include a wide range of systems, instruments, and software products that military and aerospace companies use for production test and the military services use to perform critical maintenance and repair duties.

The pace of military and aerospace technological advances has increased dramatically in recent years, resulting in board assemblies of greater complexity, speed and accuracy. New programs, such as the F-35 Joint Strike Fighter, as well as widespread retrofit and upgrade programs are continuing to fuel the demand for high performance test systems. Teradyne is a leading provider of test instrumentation and systems with performance that is uniquely suited to the demands of military / aerospace electronics manufacturers and repair depots worldwide.

Successful penetration in this market is illustrated by Teradyne's sales into major Department of Defense programs, including the F-35 Joint Strike Fighter, B-1 Bomber and C-17 Transport.

#### *Diagnostic Solutions*

Diagnostic Solutions provides electronic test and diagnostic systems to the automotive OEM's and their major subcontractors. The systems are used throughout the vehicle's lifecycle from design through manufacture to after sale service and consist of highly integrated software and hardware components. As the number and complexity of electronic systems and embedded software proliferate in vehicles, the ability to manufacture and service those vehicles becomes increasingly dependent on electronic diagnostic equipment. Diagnostic Solutions' products fall into two categories:

##### *OEM Service Diagnostics*

OEM dealer service technicians use Diagnostic Solutions' systems to find faults in vehicles in use by their customers, and to reduce OEM warranty costs. Historically, the focus has been on fixing faults in the service bay, but is growing to include constant monitoring of the vehicle to predict and prevent failure.

##### *Vehicle Configuration and Test Solutions ("VCATS")*

Diagnostic Solution's VCATS™ products are used on automotive and major automotive subassembly production lines. Diagnostic Solution's VCATS connects to the vehicle to test and program (or "configure") the

electronic systems on vehicles. These vehicle electronic systems include engine control modules and subsystems such as braking, navigation and air conditioning. Diagnostic Solutions is also able to link to an OEM's manufacturing control system in order to provide statistical quality reports to operators and management. In addition, Diagnostic Solutions also provides VCATS solutions to subcontractors to the OEMs.

Both VCATS and OEM Service Diagnostics products utilize Diagnostic Solutions' "GRADE-X™" authoring software enabling the manufacturing and service phases of vehicle development. Diagnostics for electronic modules and systems used on Diagnostic Solutions' customers' vehicles can be developed and written using the GRADE-X authoring software. The actual diagnosis of a customer's vehicle occurs in the OEM dealer's service bay utilizing a runtime portion of the software to facilitate the service and repair of the vehicle.

**Broadband Test Systems**

Broadband Test provides test systems for voice and digital subscriber line ("DSL") telephone networks. Teradyne's Celerity® DSL test system is equipped on approximately 60 million subscriber lines to qualify DSL services provided by major telephone companies.

Teradyne products within the Broadband Test Systems market include:

**4TEL™ Voice Service Test System**

Testing more than 130 million access lines worldwide for many of the world's largest telecommunications companies, Teradyne's 4TEL voice service assurance system is designed to automate customer care and field repair processes to reduce network maintenance and operating costs. 4TEL accurately identifies and isolates faults in the central office exchange, the copper cable to the consumer's premise, and the premise itself.

**Celerity DSL Test System**

Telephone companies need to know which telephone lines between the central office and the consumer are qualified for broadband DSL service before committing service to consumers. Teradyne's patented Celerity system uses accurate insertion loss, length and load coil detection, to qualify millions of lines in hours for DSL service. This information is then used to support DSL point-of-sale and marketing efforts. Celerity finds more DSL-ready lines in the network that can be sold to residential and small business customers. It also helps reduce the cost of provisioning DSL through automation of the loop qualification process and reduction of field dispatches.

Celerity also provides on-demand testing for in-service DSL lines to support quick fault isolation and efficient field repair dispatches. The Celerity system enables a repair technician or call center receptionist to determine the cause of a DSL-related problem by identifying both the type of problem on the line and the dispatch location of the fault. This capability reduces operating costs and decreases DSL maintenance costs.

**Summary of Net Revenue by Reportable Segment**

Teradyne's four reportable segments accounted for the following percentages of consolidated net revenue for each of last three years:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Semiconductor Test Systems .....	64%	55%	46%
Connection Systems .....	21	26	32
Assembly Test Systems .....	9	11	14
Other Test Systems .....	<u>6</u>	<u>8</u>	<u>8</u>
Total .....	100%	100%	100%

## Investor Information

Teradyne, a Massachusetts corporation incorporated on September 23, 1960, is subject to the informational requirements of the Securities Exchange Act of 1934 (the "Exchange Act"). Therefore, Teradyne files periodic reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 450 Fifth Street, NW, Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically.

You can access financial and other information, including charters for Teradyne's Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee and Teradyne's Corporate Governance Guidelines and Standards of Business Conduct ("Ethics Policy"), by clicking the Investors link on Teradyne's website at [www.teradyne.com](http://www.teradyne.com). Teradyne makes available, free of charge, copies of its SEC filings, including its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act through Teradyne's website as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

## Sales and Distribution

Prices for Teradyne's systems can reach \$3 million or more. In 2004, 2003, and 2002 no single customer accounted for more than 10% of Teradyne's consolidated net revenue. In each of the years 2004, 2003, and 2002, Teradyne's three largest customers in aggregate accounted for 18%, 21%, and 23% of consolidated net revenue, respectively.

Direct sales to United States government agencies accounted for less than 2% of consolidated net revenue in 2004, 2003 and 2002. Approximately 23%, 12%, and 10% of Assembly Test Systems revenue in 2004, 2003 and 2002, respectively, was to United States government agencies and 24%, 28% and 15% of Assembly Test Systems revenue in 2004, 2003 and 2002, respectively, was to customers who are government contractors.

Teradyne has sales and service offices located throughout North America, Asia, and Europe, as Teradyne's customers outside the United States are located primarily in these geographic areas. Teradyne sells in these areas predominantly through a direct sales force. Although Teradyne conducts some manufacturing activities outside the U.S. as detailed in Item 2—Properties, Teradyne's manufacturing activities are primarily conducted in the United States.

Sales to customers outside the United States accounted for 70% of consolidated net revenue in 2004, 63% in 2003, and 54% in 2002. Sales to customers located in Singapore were 13%, 11%, and 8% of consolidated net revenue in 2004, 2003, and 2002, respectively. Sales to customers located in Taiwan were 15%, 9%, and 9% of consolidated net revenue in 2004, 2003 and 2002, respectively. Sales are attributed to geographic areas based on the location of the customer site.

Teradyne is subject to the inherent risks involved in international trade, such as:

- unexpected changes in legal and regulatory requirements and in policy changes affecting international markets;
- changes in tariffs and exchange rates;
- social, political and economic instability, acts of terrorism and international conflicts;
- difficulties in accounts receivable collection;
- cultural differences in the conduct of business;
- difficulties in staffing and managing international operations;
- potentially adverse tax consequences; and
- compliance with customs regulations.

Teradyne attempts to reduce the effects of currency fluctuations by hedging those currency exposures associated with certain assets and liabilities denominated in non-functional currencies and by conducting the majority of its international transactions in U.S. dollars or dollar equivalents. See also "Item 7A. Quantitative and Qualitative Disclosures About Market Risks" and "Note F: Financial Instruments" in Notes to Consolidated Financial Statements.

### Competition

Teradyne faces significant competition throughout the world in each of its reportable segments. These competitors include, among others, Advantest Corporation, Agilent Technologies, Inc., Credence Systems Corporation, and LTX Corporation. Some of Teradyne's competitors have substantially greater financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. Teradyne also faces competition from internal suppliers at several of its customers. Some of Teradyne's competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those Teradyne currently offers. Teradyne expects its competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of Teradyne's products. Moreover, increased competitive pressure could lead to intensified price-based competition, which could materially adversely affect Teradyne's business, financial condition and results of operations.

### Backlog

At December 31, 2004 and 2003, Teradyne's backlog of unfilled orders in each of its four reportable segments was as follows:

	<u>2004</u>	<u>2003</u>
	(in millions)	
Semiconductor Test Systems .....	\$224.1	\$333.7
Connection Systems .....	80.5	75.6
Assembly Test Systems .....	63.8	56.1
Other Test Systems .....	<u>38.8</u>	<u>40.7</u>
	\$407.2	\$506.1

Of the backlog at December 31, 2004, approximately 96% of the Semiconductor Test Systems backlog, 100% of the Connection Systems backlog, 100% of Assembly Test Systems backlog, and 93% of the Other Test Systems backlog is expected to be delivered in 2005. Generally, Teradyne's backlog policy requires delivery of products and services within twelve months.

Customers may delay delivery of products or cancel orders suddenly and without significant notice, subject to possible cancellation penalties. Due to possible customer changes in delivery schedules and cancellation of orders, Teradyne's backlog at any particular date is not necessarily indicative of the actual sales for any succeeding period. Delays in delivery schedules and/or cancellations of backlog during any particular period could have a material adverse effect on Teradyne's business, financial condition, and results of operations.

### Raw Materials

Teradyne's products contain electronic and mechanical components that are provided by a wide range of suppliers. Certain of these components are standard products, while others are manufactured to Teradyne's specifications. Teradyne can experience occasional delays in obtaining timely delivery of certain items. While the majority of Teradyne's components are available from multiple suppliers, certain items are obtained from sole sources. Teradyne could experience a temporary adverse impact if any of its sole source suppliers ceased to deliver products. Any prolonged inability to obtain adequate supplies, or any other circumstances that would require Teradyne to seek alternative sources of supply could have a material adverse effect on its business, financial condition, and results of operations.

## **Patents and Licenses**

Teradyne's development of its products, both hardware and software, is based in significant part on proprietary information and technology. Teradyne protects its rights in proprietary information and technology through various methods, such as:

- patents and patent applications;
- copyrights;
- trademarks;
- trade secrets;
- business practices;
- software license agreements, non-disclosure agreements, and other contracts; and
- employee agreements.

However, these protections might not be effective in all circumstances. Competitors might independently develop similar technology or exploit Teradyne's proprietary technology and/or information in countries where Teradyne lacks enforceable intellectual property rights ("IP") or enforcement of such rights through the legal system provides an insufficient deterrent. Also, IP protections can be invalidated through legal processes. While Teradyne does not believe that any single piece of intellectual property or proprietary rights is essential to its business, if a significant portion of Teradyne's intellectual property or proprietary rights is invalidated or ineffective, Teradyne's business could be materially adversely affected.

## **Employees**

As of December 31, 2004, Teradyne employed approximately 6,200 people. Since the inception of Teradyne's business, there have been no work stoppages or other labor disturbances. Teradyne has no collective bargaining contracts.

## **Engineering and Development Activities**

The highly technical nature of Teradyne's products requires a large and continuing engineering and development effort. Engineering and development expenditures were \$262.0 million in 2004, \$254.6 million in 2003 and \$293.9 million in 2002. These expenditures amounted to approximately 15% of consolidated net revenue in 2004, 19% in 2003 and 24% in 2002.

## **Environmental Affairs**

Teradyne is subject to various federal, state, and local government laws and regulations relating to the protection of employee health and safety and the environment. Teradyne accrues for all known environmental liabilities when it becomes probable that Teradyne will incur cleanup costs and those costs can reasonably be estimated. The amounts accrued do not cover sites that are in the preliminary stages of investigation. Estimated environmental costs are not expected to materially affect the financial position or results of Teradyne's operations in future periods. However, estimates of future costs are subject to change due to protracted cleanup periods and changing environmental remediation laws and regulations.

In 2001, Teradyne was designated as a "potentially responsible party" ("PRP") at a clean-up site in Los Angeles, California. This claim arises out of Teradyne's acquisition of Perception Laminates, Inc. in August 2000. Prior to that date, Perception Laminates had itself acquired certain assets of Alco Industries, Inc. under an asset purchase agreement dated July 30, 1992. Neither Teradyne nor Perception Laminates have ever conducted any operations at the Los Angeles site. Teradyne has asked the State of California to drop the PRP designation, but California has not yet agreed to do so. Management does not believe that the outcome of this matter will have a material adverse effect on Teradyne's financial position or results of operations but there can be no assurance that any such outcome would not have a material adverse effect on Teradyne's financial position or results of operations.

## **CEO Certification**

An annual CEO Certification was submitted by our CEO to the New York Stock Exchange on June 18, 2004 in accordance with the NYSE's listing standards.

## EXECUTIVE OFFICERS OF THE COMPANY

The following table sets forth the names of all executive officers of Teradyne and certain other information relating to their positions held with Teradyne and other business experience. Executive officers of Teradyne do not have a specific term of office but rather serve at the discretion of the Board of Directors.

<u>Executive Officer</u>	<u>Age</u>	<u>Position</u>	<u>Business Experience For The Past 5 Years</u>
George W. Chamillard . . .	66	Chairman of the Board	Chairman of the Board since 2000; Chief Executive Officer of Teradyne from 1997 to 2004; Director of Teradyne since 1996; President of Teradyne from 1997 to 2003; President and Chief Operating Officer of Teradyne from 1996 to 1997; Executive Vice President of Teradyne from 1994 to 1996.
Michael A. Bradley . . . . .	56	President and Chief Executive Officer	Chief Executive Officer since 2004; President of Teradyne since 2003; President of Semiconductor Test Systems from 2001 to 2003; Chief Financial Officer of Teradyne from 1999 to 2001; Vice President of Teradyne from 1992 to 2001.
Gregory R. Beecher . . . . .	47	Vice President, Chief Financial Officer and Treasurer	Vice President and Chief Financial Officer of Teradyne since 2001 and Treasurer of Teradyne since 2003; Partner at PricewaterhouseCoopers LLP from 1993 to 2001.
Eileen Casal . . . . .	46	Vice President, General Counsel and Secretary	Vice President, General Counsel and Secretary of Teradyne since 2003; Vice President, General Counsel and Corporate Secretary of GSI Lumonics Inc. from 2001 until 2003; Vice President, General Counsel and Corporate Secretary of Adero, Inc. from 2000 until 2001; Vice President, General Counsel and Assistant Clerk of Teradyne, from 1999 to 2000; from 1986 until 1999, Ms. Casal held a number of legal positions at Stratus Computer, Inc. including Vice President, General Counsel and Clerk.
John M. Casey . . . . .	56	Senior Vice President	Senior Vice President of Teradyne since 2004; President of Assembly Test Systems from 2002 to 2004; Vice President of Teradyne since 1990.
Jeffrey R. Hotchkiss . . . . .	57	President of Assembly Test Systems	President of Assembly Test Systems since 2004; Director, Chief Executive Officer and President of Empirix Corporation from 2000 to 2004; Chief Financial Officer of Teradyne from 1997 to 1999; Vice President of Teradyne from 1990 to 1999.

<u>Executive Officer</u>	<u>Age</u>	<u>Position</u>	<u>Business Experience For The Past 5 Years</u>
Mark E. Jagiela . . . . .	44	President of Semiconductor Test Systems	President of Semiconductor Test Systems since 2003; Vice President of Teradyne since 2001; General Manager of Teradyne's VLSI Test Division from 2000 to 2001; VLSI Test Division Engineering Manager from 1999 to 2000; Japan Division General Manager from 1991 to 1999.
G. Richard MacDonald . . .	56	Controller	Controller of Teradyne since 2001; Controller of Teradyne's Industrial Consumer Division from 1989 to 2001.
Edward Rogas, Jr. . . . .	64	Senior Vice President	Senior Vice President of Teradyne since 2000; Vice President of Teradyne from 1984 to 1999.
Richard E. Schneider . . . .	47	President of Connection Systems	President of Connection Systems since 2001; Vice President of Teradyne from 1998 to 2001; Connections Systems manager from 1998 to 2001.

**Item 2: Properties**

The following table provides certain information as to Teradyne's principal general offices and manufacturing facilities.

<u>Location</u>	<u>Operating Segment</u>	<u>Major Activity+</u>	<u>Approximate Square Feet of Floor Space</u>
<b>Properties Owned:</b>			
Nashua, New Hampshire	Connection Systems	2-3-4-5	524,000
Boston, Massachusetts	Semiconductor Test & Corporate Offices	1-2-3-4-5	492,000
North Reading, Massachusetts	Semiconductor Test & Assembly Test	2-3-4-5	472,000
North Reading, Massachusetts	Unoccupied		226,000(a)
North Reading, Massachusetts	Unoccupied		242,000(b)
Agoura Hills, California	Semiconductor Test	3-5	240,000
Agoura Hills, California	Semiconductor Test	6	120,000
San Jose, California	Semiconductor Test & Connection Systems	2-3-5	120,000
Kumamoto, Japan	Semiconductor Test	2-3-4-5	66,000
Deerfield, Illinois	Broadband Test	2-3-4-5	63,000
Subtotal of Owned Properties			2,565,000
<b>Properties Leased:</b>			
Westford, Massachusetts	Unoccupied		230,000(d,f)
Woburn, Massachusetts	Semiconductor Test	2-6	205,000
Mexicali, Mexico	Connection Systems	2-5	112,000
Walnut Creek, California	Unoccupied		98,000(d,e)
Shanghai, China	Connection Systems, Assembly Test, and Semiconductor Test	2-5-6	87,000
Stockport, England	Diagnostic Solutions	2-3-4-5-6	75,000
Agoura Hills, California	Semiconductor Test	6	59,000
Stoughton, Massachusetts	Unoccupied		55,000(c)
Nashua, New Hampshire	Connection Systems	6	55,000
Plano, Texas	Unoccupied		50,000(c)
Winston-Salem, North Carolina	Connection Systems	2-5-6	49,000
Dublin, Ireland	Connection Systems	2-5	46,000
Fremont, California	Unoccupied		46,000(c)
Bracknell, England	Semiconductor Test, Broadband Test, and Assembly Test	3-4-5	44,000
Tai Yuan, Taiwan	Semiconductor Test and Assembly Test	5	43,000
Subtotal of Leased Properties			1,254,000
Total Square Feet of Floor Space			<u>3,819,000</u>

+ Major activities have been separated into the following categories: 1. Corporate Administration, 2. Manufacturing, 3. Research and Development, 4. Marketing, 5. Sales and Administration, and 6. Storage and Distribution

- (a) This space is unoccupied.
- (b) This space is currently being leased to two companies.
- (c) This space is currently being subleased.
- (d) This space is unoccupied and is currently being marketed for sublease.
- (e) A termination agreement, effective May 2005, has been signed for 60,000 square feet.
- (f) A sublease for 100,000 square feet was signed during 2004. The building remains unoccupied as the tenant will not move in until September of 2005.

### Item 3: *Legal Proceedings*

After the August 2000 acquisition of Herco Technology Corp. and Perception Laminates, Inc. the former owners of those companies filed a complaint on September 5, 2001 against Teradyne and two of its executive officers. The case is now pending in Federal District Court in San Diego, California. Teradyne filed a motion to dismiss the complaint in its entirety on behalf of Teradyne and the two individual defendants. The court granted the motion in part, and the only remaining claims were that the sale of our common stock to the former owners violated certain California securities statutes and common law and that we had breached certain contractual obligations in the agreements relating to the acquisitions. Our subsequent motion for partial summary judgment with respect to the breach of contract claims was granted on November 7, 2002. On December 9, 2002, the plaintiffs filed a motion asking the court to reconsider its summary judgment ruling or, alternatively, for certification under Rule 54(b) which would grant the plaintiffs leave to appeal both the Court's ruling regarding dismissal of claims and its ruling granting summary judgment to the Ninth Circuit Court of Appeals. We opposed these motions. On April 22, 2003, the Court denied the plaintiffs' motion from reconsideration and the plaintiffs' request for certification under Rule 54(b). The only claim remaining before the District Court from the original complaint related to an allegation of fraud in connection with the setting of the transaction price. We have answered and denied all liability. On December 27, 2004, Plaintiffs voluntarily stipulated to the dismissal with prejudice of its remaining claims in the trial court, without having received any payment or other consideration from Teradyne. On February 2, 2005, the plaintiffs filed a notice of appeal from the court's prior orders dismissing certain of the plaintiffs' claims and granting partial summary judgment against them and denying the plaintiffs' motion for reconsideration.

In 2001, we were designated as a "potentially responsible party" ("PRP") at a clean-up site in Los Angeles, California. This claim arises out of Teradyne's acquisition of Perception Laminates, Inc. in August 2000. Prior to that date, Perception Laminates had itself acquired certain assets of Alco Industries Inc. under an asset purchase agreement dated July 30, 1992. Neither Teradyne nor Perception Laminates have ever conducted any operations at the Los Angeles site. We have asked the State of California to drop the PRP designation, but California has not yet agreed to do so.

In August of 2003, Hampshire Equity Partners II, LP ("HEP") informed Teradyne of a potential claim that was subsequently contained in the complaint that HEP filed on April 30, 2004 against Teradyne and Teradyne's Connection Systems segment ("TCS") in the United States District Court of the Southern District of New York, relating to its February 21, 2001 investment of \$55 million in Connector Service Corporation aka AMAX Plating, Inc. ("CSC"), which was a supplier to TCS at the time. During the due diligence that HEP conducted prior to making that investment, an agent of HEP spoke with TCS, among other CSC customers, concerning CSC. On or about September 24, 2003, CSC filed for bankruptcy protection as discussed above. HEP has now brought suit against Teradyne and TCS asserting fraud and negligence based claims, and a claim for intentional interference with economic opportunity, relating to statements that a TCS representative made to HEP's agent prior to HEP's February 2001 investment in CSC. HEP seeks to hold Teradyne and TCS responsible for its decision to invest in CSC and for the losses that it suffered upon the bankruptcy of CSC. HEP is now seeking damages for an unstated amount of not less than \$55 million. On June 17, 2004, Teradyne and TCS filed a motion to dismiss HEP's complaint in its entirety. On August 9, 2004, HEP filed its opposition to the motion to dismiss and Teradyne filed its reply brief on September 22, 2004. Teradyne's motion to dismiss remains pending.

We believe that we have meritorious defenses against the above unsettled claims and intend to vigorously contest them. While it is not possible to predict or determine the outcomes of the unsettled claims or to provide possible ranges of losses that may arise, we believe the losses associated with all of these actions will not have a material adverse effect on our consolidated financial position or liquidity, but could possibly be material to our consolidated results of operations of any one period.

In addition, we are subject to legal proceedings, claims and investigations that arise in the ordinary course of business such as, but not limited to, patent, employment, commercial and environmental matters. Although there can be no assurance, there are no such matters pending that we expect to be material with respect to our business, financial position or results of operations.

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

None.

**PART II**

**Item 5: Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities**

The following table shows the market range for Teradyne's Common Stock based on reported sale prices on the New York Stock Exchange.

	<u>Period</u>	<u>High</u>	<u>Low</u>
2003	First Quarter .....	\$16.25	\$ 8.75
	Second Quarter .....	19.22	11.00
	Third Quarter .....	22.55	14.89
	Fourth Quarter .....	26.31	18.22
2004	First Quarter .....	\$30.70	\$20.47
	Second Quarter .....	25.81	19.60
	Third Quarter .....	20.99	12.53
	Fourth Quarter .....	18.97	13.10

The number of record holders of Teradyne's Common Stock at February 28, 2005 was 2,997.

Teradyne has never paid cash dividends because it has been Teradyne's policy to use earnings to finance expansion and growth. Payment of future cash dividends will rest within the discretion of the Board of Directors and will depend, among other things, upon Teradyne's earnings, capital requirements and financial condition. Teradyne presently expects to retain all of its earnings for use in the business.

See "Equity Compensation Plans" in "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations," for information on equity compensation plans.

**Item 6: Selected Financial Data**

	Years Ended December 31,*				
	2004	2003	2002	2001	2000
(dollars in thousands, except per share amounts)					
<b>Consolidated Statement of Operations Data:</b>					
Net revenues	\$1,791,880	\$1,352,867	\$1,222,236	\$1,440,581	\$3,043,946
Income (loss) before cumulative effect of change in accounting principle	165,237	(193,993)	(718,469)	(202,215)	517,754
Cumulative effect of change in accounting principle	—	—	—	—	(64,138)
Net income (loss)	165,237	(193,993)	(718,469)	(202,215)	453,616
Income (loss) before cumulative effect of change in accounting principle per common share—basic	0.85	(1.03)	(3.93)	(1.15)	2.99
Cumulative effect of change in accounting principle per common share—basic	—	—	—	—	(0.37)
Net income (loss) per common share—basic	0.85	(1.03)	(3.93)	(1.15)	2.62
Income (loss) before cumulative effect of change in accounting principle per common share—diluted	0.84	(1.03)	(3.93)	(1.15)	2.86
Cumulative effect of change in accounting principle per common share—diluted	—	—	—	—	(0.35)
Net income (loss) per common share—diluted	0.84	(1.03)	(3.93)	(1.15)	2.51
<b>Consolidated Balance Sheet Data:</b>					
Total assets	1,922,562	1,785,362	1,900,150	2,542,391	2,355,868
Long-term obligations	398,932	407,658	450,561	451,682	8,352

\*Note: In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes certain of the Staff's views in applying generally accepted accounting principles to revenue recognition in financial statements. During the fourth quarter of 2000, Teradyne implemented the SEC's SAB 101 guidelines, retroactive to the beginning of the year. This was reported as a cumulative effect of a change in accounting principle as of January 1, 2000. The cumulative effect of the change in accounting principle on prior years resulted in a charge to income of \$64.1 million (net of income taxes of \$27.5 million) or \$0.35 per diluted share which has been included in income for the fiscal year ended December 31, 2000. For the fiscal year ended December 31, 2000, Teradyne recognized \$126.1 million in revenue that is included in the cumulative effect adjustment as of January 1, 2000.

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

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. In addition to the historical information contained in this document, the discussion in this Annual Report on Form 10-K contains forward-looking statements, made pursuant to Section 21E of the Securities Exchange Act of 1934, that involve risks and uncertainties, such as statements of Teradyne's plans, expectations and intentions. The cautionary statements made in this Annual Report on Form 10-K should be read as being applicable to all related forward-looking statements whenever they appear in this Annual Report on Form 10-K. Teradyne's actual results could differ

materially from the results contemplated by these and any other forward-looking statements. Factors that could contribute to such differences include those discussed below as well as those cautionary statements and other factors set forth in "Certain Factors That May Affect Future Results" and elsewhere herein.

### **Critical Accounting Policies and Estimates**

Teradyne has identified the policies discussed below as critical to understanding its business and its results of operations. The impact and any associated risks related to these policies on its business operations is discussed throughout Management's Discussion and Analysis of Financial Condition and Results of Operations where such policies affect its reported and expected financial results.

#### ***Preparation of Financial Statements and Use of Estimates***

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to inventories, investments, goodwill, intangible and other long-lived assets, bad debts, income taxes, pensions, warranties, contingencies, and litigation. Management bases its estimates on historical experience and on appropriate and customary assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

#### ***Revenue Recognition***

In accordance with the guidance provided by the Securities and Exchange Commission's Staff Accounting Bulletin No. 104, "Revenue Recognition," Teradyne recognizes revenue when there is persuasive evidence of an arrangement, title and risk of loss have passed, delivery has occurred or the services have been rendered, the sales price is fixed or determinable and collection of the related receivable is reasonably assured. Title and risk of loss generally pass to Teradyne's customers upon shipment. In circumstances where either title or risk of loss pass upon destination, acceptance or cash payment, Teradyne defers revenue recognition until such events occur.

For equipment that includes hardware and software that is incidental to the product, revenue is recognized upon shipment provided that customer acceptance criteria can be demonstrated prior to shipment. Certain contracts require Teradyne to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, or in the case of new products, revenue is deferred until customer acceptance has been received. For multiple element arrangements, Teradyne defers the greater of the fair value of any undelivered elements of the contract or the portion of the sales price which is not payable until the undelivered elements are delivered. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered item must be considered probable and substantially in the control of Teradyne. Teradyne also defers the portion of the sales price that is not due until acceptance, which represents deferred profit. Fair value is the price charged when the element is sold separately. Teradyne's post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five to fifteen days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customer's ability to use the product. Teradyne defers revenue for the fair value of installation and training. Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with FASB Technical Bulletin 90-1. Teradyne's products are generally subject to warranty and related costs are provided for in cost of revenue when product revenue is recognized. Teradyne classifies shipping and handling costs in cost of revenue. Service revenue is recognized over the contractual period or as the services are performed.

Connection Systems revenue is generally recognized upon shipment according to the shipping terms of the arrangement as there is no installation required and there are no contractual acceptance requirements.

Teradyne does not provide its customers with contractual rights of return for any of its products.

For transactions involving the sale of software which is not incidental to the product, revenue is recognized in accordance with American Institute of Certified Public Accountants ("AICPA") Statement of Position No. 97-2 ("SOP 97-2"), "Software Revenue Recognition," as amended by SOP No. 98-9 "Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions." Teradyne recognizes revenue when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable and collectibility is probable. In instances where an arrangement contains multiple elements, revenue is deferred related to the undelivered elements to the extent that vendor-specific objective evidence of fair value ("VSOE") exists for such elements. In instances where VSOE does not exist for one or more of the undelivered elements of an arrangement, all revenue related to the arrangement is deferred until all elements have been delivered. VSOE is the price charged when the element is sold separately. Revenue for the separate elements is only recognized where the functionality of the undelivered element is not essential to the delivered element.

For certain contracts eligible for contract accounting under SOP No. 81-1 "Accounting for Performance of Construction-Type and Certain Production-Type Contracts," revenue is recognized using the percentage-of-completion accounting method based upon the percentage of incurred costs to estimated total costs. These arrangements require significant production, modification or customization. In all cases, changes to total estimated costs and anticipated losses, if any, are recognized in the period in which they are determined. With respect to contract change orders, claims or similar items, judgment must be used in estimating related amounts and assessing the potential for realization. Such amounts are only included in the contract value when they can be reliably estimated and realization is reasonably assured, generally upon receipt of a customer approved change order.

### ***Inventories***

Inventories, which include materials, labor, and manufacturing overhead, are stated at the lower of cost (first-in, first-out basis) or net realizable value. On a quarterly basis, Teradyne uses consistent methodologies to evaluate all inventory for net realizable value. Teradyne records a provision for excess and obsolete inventory when such a writedown is identified through the quarterly review process. The inventory valuation is based upon assumptions about future demand, product mix and possible alternative uses.

### ***Stock Option and Stock Purchase Plans***

Teradyne accounts for its director and employee stock option and employee stock purchase plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and related Interpretations. Teradyne's employee stock purchase plan is a non-compensatory plan. Teradyne's stock option plans are accounted for using the intrinsic value method under the provisions of APB 25. Accordingly, there have been no charges for employee or director stock options or employee stock purchase plans. Proceeds from the exercise of stock options and the issuance of stock under the employee stock purchase plan are credited to common stock at par value and the excess is credited to additional paid-in capital.

Teradyne makes pro forma footnote disclosures as though the fair value method was followed under Statement of Financial Accounting Standard No. 123, "Accounting For Stock-Based Compensation" ("FAS 123"), as amended by SFAS No. 148, "Accounting for Stock Based Compensation – Transition and Disclosure." See "Note B: Accounting Policies," in the Notes to Consolidated Financial Statements for pro forma stock option and stock purchase plan information.

In December 2004, the FASB issued SFAS No. 123R (revised 2004), "Share-Based Payment" ("SFAS 123R"). In interim or annual periods beginning after June 15, 2005, SFAS 123R would eliminate the ability to

account for equity-based compensation using the intrinsic value-based method under APB 25. SFAS 123R requires companies' to calculate equity-based compensation expense for stock compensation awards based on the fair value of the equity instrument at the time of grant. Under SFAS 123R, equity-based compensation is required to be recognized in companies' financial statements. Teradyne expects to adopt SFAS 123R in the third quarter of 2005, as required. For the years ended December 31, 2004, 2003 and 2002, had SFAS 123R been effective, Teradyne would have recognized additional non-cash equity-based compensation expense of \$91.8 million, \$85.1 million, and \$110.3 million, respectively, applying the provisions of SFAS 123.

#### ***Income Taxes***

On a quarterly basis, Teradyne evaluates the realizability of its deferred tax assets and assesses the need for a valuation allowance. As a result of its review undertaken at December 31, 2002, Teradyne concluded under applicable accounting criteria that it was more likely than not that its deferred tax assets would not be realized and established a valuation allowance. Due to the continued uncertainty of realization, Teradyne maintained its valuation allowance at December 31, 2003 and 2004. Teradyne does not expect to significantly reduce its valuation allowance until sufficient positive evidence, including sustained profitability, exists that realization is more likely than not.

#### ***Goodwill, Intangible and Long-Lived Assets***

Teradyne assesses the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors Teradyne considers important in the determination of an impairment include significant underperformance relative to historical or projected future operating results, significant changes in the manner of Teradyne's use of the acquired asset and significant negative industry or economic trends. When Teradyne determines that the carrying value of *intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment*, Teradyne measures any impairment based on a projected discounted cash flow method using a discount rate commensurate with the associated risks. Teradyne assesses goodwill for impairment at least annually in the fourth quarter, on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess.

#### ***Accounts Receivable and Allowance for Doubtful Accounts***

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The volatility of the industries that Teradyne serves can cause certain of its customers to experience shortages of cash flows, which can impact their ability to make required payments. Teradyne maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. Estimated allowances for doubtful accounts are reviewed periodically taking into account the customer's current payment history, the customer's current financial statements and other information regarding the customer's credit worthiness. If the financial condition of Teradyne's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Account balances are charged off against the allowance when it is probable the receivable will not be recovered.

**SELECTED RELATIONSHIPS WITHIN THE CONSOLIDATED  
STATEMENTS OF OPERATIONS**

	<u>Year Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Percentage of net revenue:			
Net Revenue:			
Products .....	86.8%	82.5%	81.2%
Service .....	<u>13.2</u>	<u>17.5</u>	<u>18.8</u>
Total net revenue .....	100.0	100.0	100.0
Cost of Revenues:			
Cost of products .....	50.4	59.0	67.9
Cost of service .....	<u>9.2</u>	<u>11.5</u>	<u>13.1</u>
Total cost of revenue .....	59.6	70.5	81.0
Gross Profit .....	40.4	29.5	19.0
Operating Expenses:			
Engineering and development .....	14.6	18.8	24.0
Selling and administrative .....	15.0	18.4	23.8
Restructuring and other charges .....	0.3	5.3	10.2
Goodwill impairment .....	—	—	6.5
Gain on the sale of a business .....	—	—	—
	<u>29.9</u>	<u>42.5</u>	<u>64.5</u>
Net interest and other (expense) income .....	—	<u>(0.7)</u>	<u>(0.4)</u>
Income (loss) before income taxes .....	10.5	(13.7)	(45.9)
Provision for income taxes .....	<u>1.3</u>	<u>0.6</u>	<u>12.9</u>
Net income (loss) .....	<u>9.2%</u>	<u>(14.3)%</u>	<u>(58.8)%</u>

**Results of Operations:**

**Bookings**

Teradyne's net orders for its four reportable segments for 2004, 2003 and 2002 are as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u> <u>Percent</u> <u>Change</u>	<u>2002-2003</u> <u>Percent</u> <u>Change</u>
	(in millions except percent change)				
Semiconductor Test Systems .....	\$1,036.4	\$ 837.9	\$480.5	24%	74%
Connection Systems .....	384.8	317.7	149.8	21	112
Assembly Test Systems .....	162.1	156.6	167.8	4	(7)
Other Test Systems .....	<u>107.6</u>	<u>105.9</u>	<u>107.2</u>	<u>2</u>	<u>(1)</u>
	<u>\$1,690.9</u>	<u>\$1,418.1</u>	<u>\$905.3</u>	<u>19%</u>	<u>57%</u>

From 2003 to 2004, Semiconductor Test Systems bookings increased due to growth in the overall system-on-a-chip ("SOC") tester market (excluding memory testers). Semiconductor Test Systems bookings within the SOC market showed a continuation of the growth in Asian markets from 2003 into 2004, mainly related to Subcons in Taiwan and Singapore. Over 2004, Teradyne saw a rise in bookings driven primarily by semiconductor testing needs in the wireless, broadband, consumer electronics, and mass storage/datacom markets, which are serviced by the J750, Catalyst and FLEX products, and whose chips are sold mainly by European and U.S. semiconductor companies. Many of these chips are fabricated and tested by Foundries and

Subcons in many parts of Asia, but concentrated in Taiwan and Singapore. The economic downturn which prevailed in past years has pushed companies to lower fixed costs. As a result, an increasing trend by chip makers has been to outsource non-core competency testing needs to Subcons in low cost regions. As total Semiconductor Test Systems bookings have grown, the bookings from Subcons have continued to make up a large percentage of total orders. Bookings from Subcons increased 45% to \$443 million in 2004 from \$307 million in 2003, and made up 43% of bookings in 2004 compared to 37% in 2003. Semiconductor Test Systems backlog increased from 2002 to 2003 primarily due to increased orders from Subcons and Foundries located in the Asian markets.

The growth in Connection Systems orders from 2003 to 2004 was a result of continued spending for wireless network deployments in the United States and Europe as well as an increase in network spending for both the enterprise and service provider markets. The computer/server market was also strong. Bookings were up appreciably for Connection Systems' VHDM-HSD backplane interconnect product lines as well as the NeXLev family of high-speed, high-density mezzanine connectors. Similar to 2003, the growth in orders was partially offset by a decline in orders due to the decision to exit a portion of Connection Systems' lower margin EMS product line. The increase in Connection Systems bookings from 2002 to 2003 was due in part to a decrease in cancellations in 2003, as well as an increase in demand in the telecommunications market, driven by wireless network deployments, which increased for both U.S. and European telecommunications equipment providers in the latter part of the fourth quarter of 2003 compared to the first half of 2003.

Orders in the Assembly Test Systems segment increased from 2003 to 2004, primarily driven by increases in the mil/aero business and increased sales of in-circuit products. The growth in these areas was offset by a decline in orders resulting from the sale of the manufacturing software and the manual x-ray and rework product lines in 2003. The net decrease in Assembly Test Systems orders from 2002 to 2003 is due primarily to the sale of the manufacturing software and the manual x-ray and rework product lines. This decrease was offset by a 25% increase in orders by government agencies and contractors in the Mil/Aero business, which had a twofold increase in orders from the first half to the second half of 2003.

Teradyne's cancellations for its four reportable segments for the last three years are as follows:

	2004	2003	2002
	(in millions)		
Semiconductor Test Systems .....	\$10.5	\$ 6.9	\$ 52.5
Connection Systems .....	—	16.0	104.3
Assembly Test Systems .....	0.2	2.5	2.2
Other Test Systems .....	—	—	—
	<u>\$10.7</u>	<u>\$25.4</u>	<u>\$159.0</u>

Semiconductor Test Systems experienced \$10.5 million of cancellations and backlog adjustments in 2004. Approximately 50% of this amount was related to cancellations, while the remainder was a backlog adjustment related to management's estimate of what may be canceled in future periods.

The Connection Systems cancellations in 2003 were from major customers in the telecommunications and networking infrastructure industries, due principally to product program cancellations.

Teradyne's net bookings by region as a percentage of total net bookings are as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
United States .....	32%	35%	44%
South East Asia .....	19	18	13
Europe .....	17	17	18
Taiwan .....	15	10	6
Singapore .....	11	11	8
Japan .....	5	8	9
Rest of the World .....	<u>1</u>	<u>1</u>	<u>2</u>
	100%	100%	100%

For the past three years, Teradyne's backlog of unfilled orders for its four reportable segments is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(in millions)		
Semiconductor Test Systems .....	\$224.1	\$333.7	\$240.0
Connection Systems .....	80.5	75.6	104.2
Assembly Test Systems .....	63.8	56.1	53.4
Other Test Systems .....	<u>38.8</u>	<u>40.7</u>	<u>43.3</u>
	\$407.2	\$506.1	\$440.9

Customers may delay delivery of products or cancel orders suddenly and without significant notice, subject to possible cancellation penalties. In 2004, 2003, and 2002 there were no significant cancellation penalties received. Due to possible customer changes in delivery schedules and cancellation of orders, Teradyne's backlog at any particular date is not necessarily indicative of the actual sales for any succeeding period. Delays in delivery schedules and/or cancellations of backlog during any particular period could have a material adverse effect on Teradyne's business, financial condition, and results of operations.

#### Revenue

Teradyne's net revenue for its four reportable segments for 2004, 2003 and 2002 is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u> <u>Percent</u> <u>Change</u>	<u>2002-2003</u> <u>Percent</u> <u>Change</u>
	(in millions except percent change)				
Semiconductor Test Systems .....	\$1,146.3	\$ 735.4	\$ 557.5	56%	32%
Connection Systems .....	381.7	357.2	397.0	7	(10)
Assembly Test Systems .....	155.2	151.6	170.8	2	(11)
Other Test Systems .....	<u>108.7</u>	<u>108.7</u>	<u>96.9</u>	—	<u>12</u>
	\$1,791.9	\$1,352.9	\$1,222.2	32%	11%

The increase in Semiconductor Test Systems sales from 2003 to 2004 is attributable to growth in the overall SOC test market, and a share gain by Semiconductor Test Systems in that market. The worldwide market for semiconductor test equipment (excluding memory testers) grew by approximately 34% in 2004. Semiconductor Test System's share in that market grew from 2003 to 2004. Much of the increased sales for Semiconductor Test Systems came from Subcon customers for use in their Asian facilities, primarily in Singapore and Taiwan. The revenue derived from Subcons was driven by higher demand from their mixed signal SOC customers, led by sales of Catalyst and FLEX systems. As is described in the Bookings section, Semiconductor Test Systems has seen growth in revenue from 2003 to 2004 due to increased need for testing in the wireless, broadband, and to a lesser extent, mass storage/datacom sectors. Sales of the J750 product were also relatively strong in 2004, serving the microcontroller and high volume logic customer segments. Similar to the increase in sales from 2003 to 2004, the increase from 2002 to 2003 was attributable to increased demand from Subcons located in the Asian markets, particularly, Singapore, Taiwan, and Malaysia.

Connection Systems sales in 2004 increased to \$381.7 million led by stronger customer demand for Connection Systems' high-speed, high-density interconnect products, which more than offset the decrease in sales associated with the exiting of the lower margin EMS business in 2003. Connection Systems sales declined from 2002 to 2003 primarily as a result of the decision to exit the lower margin EMS business. The segment saw downward pricing pressure throughout the past three years.

The increase in Assembly Test Systems sales from 2003 to 2004 was due to increases in both the commercial and mil/aero businesses. Commercial business growth was due to increased sales of in circuit test products, while the increase in mil/aero sales was generated by a number of large projects which were undertaken in 2004. These increases were offset, in part, by decreases from the sale of the manual x-ray, rework and AOI product lines in 2003. From 2002 through 2003, the commercial business saw decreases in revenue, particularly due to the sale of product lines referenced above, while mil/aero revenue increased slightly year over year.

Teradyne's four reportable segments accounted for the following percentages of consolidated net revenue for each of the last three years:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Semiconductor Test Systems .....	64%	55%	46%
Connection Systems .....	21	26	32
Assembly Test Systems .....	9	11	14
Other Test Systems .....	<u>6</u>	<u>8</u>	<u>8</u>
	100%	100%	100%

Teradyne's net revenue by region as a percentage of total revenue is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
United States .....	30%	37%	46%
Europe .....	15	17	18
South East Asia .....	20	17	11
Singapore .....	13	11	8
Taiwan .....	15	9	9
Japan .....	5	8	6
Rest of the World .....	<u>2</u>	<u>1</u>	<u>2</u>
	100%	100%	100%

Teradyne's product and service revenue breakout for the past three years is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u> <u>Percent</u> <u>Change</u>	<u>2002-2003</u> <u>Percent</u> <u>Change</u>
	(In millions except percent change)				
Product Revenue .....	\$1,554.8	\$1,115.9	\$ 992.1	39%	12%
Service Revenue .....	<u>237.1</u>	<u>237.0</u>	<u>230.1</u>	—	<u>3</u>
	\$1,791.9	\$1,352.9	\$1,222.2	32%	11%

Service revenue is derived from the servicing of Teradyne's installed base of products and includes maintenance contracts, repairs, extended warranties, parts sales and applications support.

In the past three years, no single customer accounted for more than 10% of consolidated net revenue. In 2004, 2003, and 2002, Teradyne's three largest customers in the aggregate accounted for 18%, 21% and 23% of consolidated net revenue, respectively.

## Gross Margin

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004 Point Change</u>	<u>2002-2003 Point Change</u>
	(dollars in millions)				
Gross Margin .....	\$723.9	\$398.9	\$232.7		
Percent of Total Revenue .....	40.4%	29.5%	19.0%	10.9	10.5

The gross margin improvement from 2003 to 2004 was the result of several factors. An improvement of 9 points is credited to an increase in sales volumes and a shift in the mix of revenues, with higher Semiconductor Test Systems content which has higher incremental margins. The remainder is attributable to lower material costs and a reduction in fixed manufacturing costs, including depreciation and facility costs resulting from past restructuring actions.

Teradyne's gross margin improvement from 2002 to 2003 was impacted by a variety of factors, including an improvement of 4.9 points related to reduced manufacturing costs and increased volume levels, and an improvement of 2.5 points related to an increase in volume and a shift in product mix. Inventory provisions decreased from \$39.0 million in 2002 to \$16.6 million in 2003, which contributed a 2.0 point gross margin improvement.

The breakout of product and service gross margin is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004 Point Change</u>	<u>2002-2003 Point Change</u>
	(dollars in millions)				
Product Gross Margin .....	\$651.4	\$317.1	\$163.0		
Percent of Product Revenue .....	41.9%	28.4%	16.4%	13.5	12.0

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004 Point Change</u>	<u>2002-2003 Point Change</u>
	(dollars in millions)				
Service Gross Margin .....	\$ 72.5	\$ 81.8	\$ 69.7		
Percent of Service Revenue .....	30.6%	34.5%	30.3%	(3.9)	4.2

Teradyne assesses the carrying value of its inventory on a quarterly basis by estimating future demand and comparing that demand against on-hand and on-order inventory positions. Forecasted revenue information is obtained from the sales and marketing groups and incorporates factors such as backlog and future revenue demand. This quarterly process identifies obsolete and excess inventory. Obsolete inventory, which represents items for which there is no demand, is fully reserved. Excess inventory, which represents inventory items that are not expected to be consumed, is written-down to estimated net realizable value. These write-offs and write-downs consist of raw materials and components. Sales of previously reserved inventory items result in recovery of the related inventory provision which is recorded in cost of revenues.

During the year ended December 31, 2004, Teradyne recorded excess and obsolete provisions in cost of revenues of \$3.5 million and \$7.8 million, respectively. Of the \$11.3 million of total excess and obsolete provisions recorded, \$6.2 million related to Semiconductor Test Systems, \$3.0 million related to Assembly Test Systems, \$1.6 million related to Connection Systems and \$0.5 million related to Other Test Systems.

During the year ended December 31, 2003, Teradyne recorded excess and obsolete provisions in cost of revenues of \$7.4 million and \$9.2 million, respectively. Of the \$16.6 million of total excess and obsolete provisions recorded, \$9.3 million related to Assembly Test Systems which included \$3.6 million relating to the discontinuance of manufacturing, distributing and primary support of the AOI product line and \$5.2 million related to Semiconductor Test Systems SOC parts and components.

During the year ended December 31, 2002, Teradyne recorded excess and obsolete provisions in cost of revenues of \$28.1 million and \$10.9 million, respectively. Of the \$39.0 million of total excess and obsolete provisions recorded, \$27.9 million related to Semiconductor Test Systems, including \$20.7 million of memory test inventory related to Probe-One and J996 product line discontinuances. The Probe-One and J996 inventory had been fully written-off as of December 31, 2003. There is no material exposure remaining for the Probe-One or J996 products.

During the years ended December 31, 2004 and 2003, Teradyne sold inventory that was previously reserved for which had a gross margin impact of \$2.2 million and \$5.3 million, respectively.

Teradyne scrapped \$44.8 million, \$30.3 million, and \$22.8 million of inventory which had been previously written-down or written-off during the years ended December 31, 2004, 2003 and 2002, respectively. Teradyne has no set timeline for scrapping the remaining inventory.

As of December 31, 2004 and 2003, Teradyne had inventory reserves for amounts which have been written-down or written-off of \$153.9 million and \$191.1 million, respectively. Of the reserves at December 31, 2004, \$10.5 million, \$12.6 million, \$3.6 million, and \$127.2 million relate to inventory provisions recorded in 2004, 2003, 2002, and prior to 2002, respectively. Of the reserves at December 31, 2003, \$16.6 million, \$20.2 million, and \$154.3 million related to inventory provisions recorded in 2003, 2002 and prior to 2002, respectively.

### Engineering and Development

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u> <u>Change</u>	<u>2002-2003</u> <u>Change</u>
	(dollars in millions)				
Engineering and Development .....	\$262.0	\$254.6	\$293.9	\$7.4	\$(39.3)
Percent of Total Revenue .....	14.6%	18.8%	24.0%		

During 2004, Teradyne maintained its commitment to sustained levels of investment in research through continued engineering and development spending. More than two-thirds of Teradyne's total engineering and development expenses are incurred by the Semiconductor Test Systems segment, where a new test platform requires up to three years for development and costs between \$150-\$250 million. During 2002 and 2003, Semiconductor Test Systems reduced the number of platforms under major development, which increased the resources for continued engineering on selective platforms. The consolidation of multiple product divisions within Semiconductor Test Systems into one group has enabled more leverage and reuse for application specific integrated circuits development and instrumentation.

The increase of \$7 million in engineering and development spending from 2003 to 2004 consists of the following amounts:

- \$7 million increase due to variable employee compensation;
- \$6 million increase in prototype material for engineering development projects;
- \$4 million increase in outsourced project engineering; and
- \$1 million increase in travel and training costs;

These increases were offset in part by the following:

- \$6 million decrease in salaries and fringe benefits due to a decrease in headcount, offset by salary increases effective July 1, 2004; and

- \$5 million decrease in depreciation and facility costs as a result of facility closures and lower capital spending, including a decrease of \$2 million in accelerated depreciation related to asset writedowns and facility closures in 2003.

The reduction in engineering and development expenses from 2002 to 2003 resulted primarily from the exiting of product lines within Semiconductor Test Systems and Assembly Test Systems. The elimination of memory test within the Semiconductor Test Systems segment resulted in a reduction of \$5 million in engineering expenses from 2002 to 2003. In addition, Semiconductor Test Systems consolidated engineering facilities, outsourced certain software engineering development to a low-cost region and limited the amount of engineering work done by outside consultants in an effort to reduce costs. As a result of the sale in Assembly Test Systems of its manufacturing software product line and manual x-ray inspection and rework product line as well as the discontinuance of the automated optical inspection products, engineering expenses from 2002 to 2003 decreased by approximately \$15 million.

The decrease from 2002 to 2003 in engineering and development spending resulting from the discontinuance of product lines and actions taken to reduce costs consists of the following amounts:

- \$16 million as a result of a workforce reduction, partially offset by a \$10 million increase from the elimination of company-wide paycuts and the granting of previously frozen salary increases in the third quarter of 2002;
- \$13 million from a reduction in outsourced contract engineering;
- \$4 million from a decrease in depreciation as a result of the recent writedown of assets, as well as the trend to rent or lease, rather than purchase, development tools; and
- \$3 million from reduced office and facility costs.

#### Selling and Administrative

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u> Change	<u>2002-2003</u> Change
	(dollars in millions)				
Selling and Administrative .....	\$268.6	\$249.5	\$290.4	\$19.1	\$(40.9)
Percent of Total Revenue .....	15.0%	18.4%	23.8%		

The increase in spending of \$19 million from 2003 to 2004 was principally due to the following approximate amounts:

- \$16 million increase due to variable employee compensation;
- \$7 million from an increase in consulting expenses; and
- \$3 million increase in travel and training costs;

These increases were offset in part by the following:

- \$5 million in lower depreciation costs due to asset writedowns and capital spending cutbacks; and
- \$2 million decrease in rental and lease payments due to increased sublease income and facilities consolidation.

The decrease in spending from 2002 to 2003 was principally due to the following approximate amounts:

- \$18 million as a result of a workforce reduction, partially offset by a \$3 million increase from the elimination of company-wide paycuts and the granting of previously frozen salary increases;
- \$12 million in reduced utility costs from the consolidation of facilities, lower promotional spending and travel cutbacks;
- \$7 million from a decrease in consulting spending and legal fees; and
- \$4 million in lower depreciation due to the writedown of assets.

## Restructuring and Other Charges

The tables below represent activity related to restructuring charges for the years ended December 31, 2004, 2003, and 2002. The accrual for severance and benefits is reflected in accrued employees' compensation and withholdings. The accrual for lease payments on vacated facilities is reflected in other accrued liabilities and other long-term accrued liabilities and is expected to be paid out over the lease terms, the latest of which expires in 2012. Teradyne expects to pay out approximately \$7.0 million against the lease accruals over the next twelve months. Teradyne's future lease commitments are net of expected sublease income of \$13 million as of December 31, 2004. Teradyne has subleased approximately 52% of its unoccupied space as of December 31, 2004 and is actively attempting to sublease the remaining space.

The table below summarizes the liability and activity for the year ended December 31, 2004 relating to restructuring and other charges (in thousands):

	<u>Long-Lived Asset Impairment</u>	<u>Severance and Benefits</u>	<u>Facility Related</u>	<u>Other Charges</u>	<u>Total</u>
Balance at December 31, 2003 .....	\$ —	\$ 7,766	\$ 29,222	\$ 1,273	\$ 38,261
2004 provision (reversal) .....	810	2,864	3,188	(1,503)	5,359
Cash payments .....	—	(7,570)	(11,182)	1,259	(17,493)
Asset write-downs .....	(810)	—	—	—	(810)
Balance at December 31, 2004 .....	<u>\$ —</u>	<u>\$ 3,060</u>	<u>\$ 21,228</u>	<u>\$ 1,029</u>	<u>\$ 25,317</u>

During the year ended December 31, 2004, Teradyne recorded the following activity related to restructuring and other charges:

- \$1.4 million reversal due to revised estimates related to long-lived asset impairment charges that had previously been recorded where the impaired assets sold for more than their respective carrying amounts, and \$2.2 million of charges for certain long-lived assets that were impaired as the estimated value of such assets was less than the carrying amount. The Assembly Test Systems segment recorded \$1.1 million of this charge and \$0.9 million was recorded in the Connection Systems segment. The remainder of the charge was recorded across other reportable segments.
- \$5.0 million charge taken for severance and related benefits. This charge is offset by a \$2.1 million reversal of estimates on future benefits for severed employees. There were approximately 184 employees terminated in the year ended December 31, 2004 across Teradyne.
- \$3.2 million charge for revised estimates of losses due to changes in the assumed amount and timing of sublease income on facilities that have been exited prior to the end of the lease term. The Connection Systems, Assembly Test and Semiconductor Test segments recorded \$2.0 million, \$1.0 million and \$0.2 million, respectively.
- \$1.5 million net reversal of other charges consisting of \$1.4 million of amounts realized under agreements related to product lines that were sold, and \$0.1 million of revisions of estimates of liabilities incurred during restructuring activities, both of which occurred in prior reporting periods in the Assembly Test and Other Test Systems segments.

The restructuring actions taken in 2004 are expected to generate cost savings of approximately \$13.8 million annually across all areas of operations.

During 2004, Teradyne recorded a gain on the sale of a business of \$0.9 million. This amount related to an earn-out provision from a divestiture in the Connection Systems segment in 1999, and has been classified as a gain on the sale of business in the statement of operations for the year ended December 31, 2004.

The table below summarizes the liability and activity for the year ended December 31, 2003 relating to restructuring and other charges:

	<u>Long-Lived Asset Impairment</u>	<u>Severance and Benefits</u>	<u>Loss on Sale of Product Lines</u>	<u>Facility Related</u>	<u>Other Charges</u>	<u>Total</u>
			(in thousands)			
Balance at December 31, 2002 .....	\$ —	\$ 8,242	\$ —	\$25,240	\$ —	\$ 33,482
2003 provision .....	29,403	21,367	6,891	12,350	1,273	71,284
Cash payments .....	—	(21,843)	—	(8,368)	—	(30,211)
Asset writedowns .....	(29,403)	—	(6,891)	—	—	(36,294)
Balance at December 31, 2003 .....	<u>\$ —</u>	<u>\$ 7,766</u>	<u>\$ —</u>	<u>\$29,222</u>	<u>\$1,273</u>	<u>\$ 38,261</u>

During the year ended December 31, 2003, Teradyne recorded the following activity related to restructuring and other charges:

- \$29.4 million charge, primarily for certain long-lived assets held for sale that were impaired as the estimated fair value was less than the carrying value of the assets, including \$11.2 million for the sale and leaseback of certain manufacturing assets, and \$7.8 million for a reduction in the fair value of properties held for sale in the Connection Systems segment. The charge for the Semiconductor Test Systems segment of \$3.5 million related primarily to a reduction in the fair value of properties held for sale, and \$6.9 million related to the impairment of manufacturing assets held for sale in the Assembly Test Systems segment.
- \$21.4 million charge for severance and related benefits. There were approximately 890 employees terminated in 2003 across Teradyne.
- \$8.1 million charge for the loss on sale of product lines, of which \$6.9 million has been recorded in restructuring and other charges and \$1.2 million has been recorded in cost of sales. The product lines sold were in the Assembly Test Systems segment and the Other Systems segment. In the first quarter of 2003, the Assembly Test Systems segment sold its manufacturing software product line and manual x-ray inspection and rework product line for total cash proceeds of \$2.1 million. These transactions resulted in a loss of \$6.7 million for the year ended December 31, 2003 of which \$6.2 million has been recorded in restructuring and other charges, and \$0.5 million has been recorded in cost of sales. In the year ended December 31, 2003, the Other Test Systems Segment recorded a charge of \$1.4 million to write down its net assets relating to the sale of the Autodiagnosis automotive after market product line of which \$0.7 million has been recorded in restructuring and other charges and \$0.7 million has been recorded in cost of sales.
- \$12.4 million charge consisting primarily of revised estimates of losses due to changes in the assumed amount and timing of sublease income on facilities that have been exited prior to the end of the lease term. The Connection Systems segment recorded \$3.2 million of this charge and \$8.7 million was recorded in the Assembly Test Systems segment. The remainder of the charge was recorded across other operating segments.
- \$1.3 million charge primarily for contractual penalties associated with resizing the Connections Systems segment.

The restructuring actions taken in 2003 were expected to generate cost savings of approximately \$86.3 million annually across all areas of operations.

The table below summarizes activity for the year ended December 31, 2002 relating to restructuring and other charges:

	Long-Lived Asset Impairment	Facility Related	Severance and Benefits	Total
	(in thousands)			
Balance at December 31, 2001 .....	\$ —	\$ 1,676	8,471	\$ 10,147
2002 provision .....	76,994	25,751	22,495	125,240
Cash payments .....	—	(2,187)	(22,724)	(24,911)
Asset writedowns .....	(76,994)	—	—	(76,994)
Balance at December 31, 2002 .....	<u>\$ —</u>	<u>\$25,240</u>	<u>\$ 8,242</u>	<u>\$ 33,482</u>

During the year ended December 31, 2002, Teradyne recorded the following activity related to restructuring and other charges:

- \$77.0 million charge primarily for certain long-lived assets held for sale that were impaired as the estimated fair value was less than the carrying value of these assets. The charges included machinery and equipment, facilities held for sale and intangible assets. All of the machinery and equipment and facilities have been sold or disposed of as of December 31, 2004.
- \$25.8 million charge related to future lease commitments for vacated manufacturing and administrative space which have been exited prior to the end of the lease term.
- \$22.5 million charge for severance and related benefits. There were approximately 1,010 employees terminated across Teradyne during the year ended December 31, 2002.

For further details on Teradyne's restructuring and other charges during 2004, 2003 and 2002 see "Note L: Restructuring and Other Charges," in the Notes to Consolidated Financial Statements.

In January 2005, Teradyne committed to a restructuring plan ("the Plan") as part of an ongoing effort to lower expenses. Pursuant to the Plan, Teradyne believes that it will incur costs for severance and related employee benefits, impairment charges and remaining lease obligations related to a vacated facility, and other charges. The total charges expected to be incurred under the Plan are \$11.0 million. The actions taken in accordance with the Plan are expected to generate cost savings of approximately \$18.4 million annually, primarily in the Connection Systems and Assembly Test segments. Through March 11, 2005, Teradyne has incurred charges of approximately \$8.2 million, related to severance and related employee benefits, remaining lease obligations and related asset impairments, and other charges.

### Goodwill Impairment

Unless conditions dictate otherwise, Teradyne's annual impairment test is performed in the fourth quarter of each fiscal year. Teradyne tested the Assembly Test Systems and Connection Systems reporting units, for impairment during its annual test and concluded that there was no impairment of goodwill in either reporting unit as of December 31, 2004 and 2003.

During the quarter ended September 28, 2003, Teradyne decreased its forecasted revenue, bookings and profit for the fiscal years 2004 through 2006 from the previous quarter's forecast for the Assembly Test Systems segment and reduced its workforce by 112 employees to appropriately size the segment given the revised business outlook. As a result, Teradyne performed an interim impairment test for the goodwill related to the Assembly Test Systems segment as of September 28, 2003. Teradyne concluded that the carrying value of the assets and liabilities associated with the Assembly Test Systems segment did not exceed its fair value and thus no impairment charge was recorded. The fair value of the segment was estimated using the expected present value of future cash flows.

During the quarter ended September 29, 2002, as a result of contraction in the Assembly Test Systems market to its lowest level in a decade as evidenced by various market reports available to Teradyne, Teradyne decreased its forecasted revenue, bookings and profit for fiscal years 2003 through 2005 from the previous quarter's forecast for the Assembly Test Systems segment and reduced its workforce by 94 employees to appropriately size the segment given the revised business outlook. As a result, Teradyne performed an interim impairment test for the goodwill related to the Assembly Test Systems segment as of September 29, 2002. Teradyne concluded that the carrying value of the assets and liabilities associated with the Assembly Test Systems segment exceeded its fair value and recognized a \$78.5 million goodwill impairment charge recorded in Goodwill impairment in the consolidated Statements of Operations. The impairment charge was measured by comparing the implied fair value of the goodwill associated with the Assembly Test Systems segment to its carrying value. The fair value of the segment was estimated using the expected present value of future cash flows.

### Interest Income and Expense

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003-2004</u>	<u>2002-2003</u>
			(in millions)	Change	Change
Interest income .....	\$ 15.4	\$ 14.0	\$ 17.0	\$1.4	\$(3.0)
Interest expense .....	\$(18.8)	\$(20.9)	\$(21.8)	\$2.1	\$ 0.9

The increase in interest income from 2003 to 2004 was due primarily to an increase in interest rates in the latter half of 2004 and increased cash balances throughout 2004. The decrease in interest income from 2002 to 2003 was attributable to lower cash balances and lower interest rates.

The decrease in interest expense from 2003 to 2004 and from 2002 to 2003 was primarily attributable to the prepayment of Teradyne's California mortgage of \$42.3 million in the third quarter of 2003 which reduced interest expense for the fourth quarter of 2003 and all of 2004, as well as the repurchase of \$8.5 million of Teradyne's 3.75% Convertible Notes in the third quarter of 2004.

### Other Income and Expense, Net

Other income and expense, net for the years ended December 31, 2004, 2003, and 2002 includes the following:

<u>Income/(expense)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(in thousands)		
Gain on sale of investment (1) .....	\$2,584	\$ 2,800	\$ —
Collection of loan (2) .....	585	—	7,144
Other than temporary impairment of common stock investment .....	(267)	—	(3,115)
Fair value adjustment on warrants .....	(366)	138	(2,051)
Mortgage prepayment penalty (3) .....	—	(3,220)	—
Other than temporary impairment of investment .....	—	(2,592)	—
Writedown of investment in an engineering service provider .....	—	—	(2,288)
Total .....	<u>\$2,536</u>	<u>\$(2,874)</u>	<u>\$ (310)</u>

- (1) Gain on sale of an investment in common stock.
- (2) The loan had previously been valued at zero due to its uncertainty of collection.
- (3) Penalties related to prepayment of a \$42.3 million mortgage loan collateralized against certain California real estate properties, which was to mature on January 1, 2007.

## Income (loss) before Income Taxes

	2004	2003	2002	2003-2004 Change	2002-2003 Change
			(in millions)		
Semiconductor Test Systems .....	\$199.4	\$ (60.1)	\$(266.1)	\$259.5	\$206.0
Connection Systems .....	25.2	(36.0)	(79.6)	61.2	43.6
Assembly Test Systems .....	—	(72.8)	(200.4)	72.8	127.6
Other Test Systems .....	6.8	2.5	1.2	4.3	1.3
Corporate .....	(43.5)	(19.8)	(16.0)	(23.7)	(3.8)
Total .....	<u>\$187.9</u>	<u>\$(186.2)</u>	<u>\$(560.9)</u>	<u>\$374.1</u>	<u>\$374.7</u>

The change to an income position from a loss position from 2003 to 2004 was mainly attributable to increased sales in the Semiconductor, Connector and Assembly Test Systems segments, as well as continued cost reductions throughout the company.

The decrease in the loss before income taxes from 2002 to 2003 in Semiconductor Test Systems, Connection Systems, and Assembly Test Systems was primarily due to cost reduction actions in the respective segments and market conditions during the year. Other Test Systems income before income taxes increased primarily due to increased revenues from 2002 to 2003.

## Income Taxes

For the years ended December 31, 2004 and 2003, tax expense relates primarily to a tax provision for foreign taxes. Tax expense for 2004 also included an IRS settlement related to the closing out of tax years 1999 through 2001. During 2004, Teradyne utilized previously reserved net operating losses to reduce taxable income and lower the effective tax rate. Teradyne did not record an income tax benefit against the loss incurred in 2003. Until sufficient positive evidence exists, including an appropriate level of profitability, Teradyne will not record tax benefits on operating losses in future results of operations. Due to the continued uncertainty of realization, Teradyne maintained its valuation allowance against its deferred tax assets at December 31, 2004 and 2003. Teradyne does not expect to significantly reduce its valuation allowance until sufficient positive evidence, including sustained profitability, exists that realization is more likely than not. The effective tax rates for the years ended December 31, 2004 and 2003 were 12.1% and 4.2%, respectively.

For the year ended December 31, 2002, Teradyne recorded a tax provision of \$157.5 million resulting in a tax rate of 28%. The tax rate of 28% is primarily due to the recording of a provision for income taxes to establish a valuation allowance against net deferred tax assets. In the fourth quarter of 2002, Teradyne recorded a tax provision to establish a valuation allowance against its net deferred tax assets. The valuation allowance was determined in accordance with the provisions of SFAS No. 109 which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. The evidence that Teradyne reviewed during the fourth quarter of 2002 included actual revenues and net loss for the fiscal year 2002 compared to earlier Teradyne forecasts, the inability to get to break-even during 2002 despite implementing several restructuring programs, and a reduction in revenues and an increase in the loss forecasted for the fiscal year 2003. As a result of its review undertaken at December 31, 2002, Teradyne concluded under applicable accounting criteria that it was more likely than not that its deferred tax assets would not be realized.

## Contractual Obligations

The following table reflects Teradyne's contractual obligations as of December 31, 2004:

	Purchase Obligations	Non-cancelable Lease Commitments*	Interest on Debt**	Convertible Senior Notes (in thousands)	Pension Funding†	Notes Payable	Other Debt	Total
2005 .....	\$146,518	\$27,681	\$14,877	\$ —	\$30,000	\$4,826	\$ 321	\$224,223
2006 .....		16,862	14,871	391,500			321	423,554
2007 .....		14,235	184				321	14,740
2008 .....		6,527	179				321	7,027
2009 .....		5,759	173				321	6,253
Beyond 2009 .....		12,817	525				6,148	19,490
Total .....	<u>\$146,518</u>	<u>\$83,881</u>	<u>\$30,809</u>	<u>\$391,500</u>	<u>\$30,000</u>	<u>\$4,826</u>	<u>\$7,753</u>	<u>\$695,287</u>

\* Minimum payments have not been reduced by minimum sublease income of \$9.6 million due in the future under non-cancelable subleases.

\*\* Includes interest on convertible notes.

† Pension funding requirements are not known beyond 2005.

## Liquidity and Capital Resources

Teradyne's cash, cash equivalents and marketable securities balance increased \$105.2 million in 2004 from 2003, to \$691.2 million. Teradyne's cash, cash equivalents and marketable securities balance decreased \$44.9 million in 2003 from 2002, to \$586.0 million and increased \$45.1 million in 2002 from 2001, to \$541.1 million. Cash activity for 2004, 2003 and 2002 was as follows (in millions):

	2004	2003	2002	2003-2004 Change	2002-2003 Change
Cash provided by (used for) operating activities:					
Cash provided by (used for) net income (loss), adjusted for non cash items: .....	\$ 299.7	\$ 15.3	\$(207.4)	\$ 284.4	\$ 222.7
Change in operating assets and liabilities, net of product lines and businesses sold and acquired .....	(44.9)	18.9	203.1	(63.8)	(184.2)
Total cash provided by (used for) operating activities .....	254.8	34.2	(4.3)	220.6	38.5
Cash used for investing activities .....	(292.9)	(114.4)	(102.2)	(178.5)	(12.2)
Cash provided by financing activities .....	18.8	57.1	40.4	(38.3)	16.7
Total .....	<u>\$ (19.3)</u>	<u>\$ (23.1)</u>	<u>\$ (66.1)</u>	<u>\$ 3.8</u>	<u>\$ 43.0</u>

Changes in operating assets and liabilities, net of product lines and businesses sold and acquired used cash of \$44.9 million in 2004 as inventory balances increased \$16.0 million across each of Teradyne's segments, although primarily in the Semiconductor Test Systems segment, and accounts payable, deferred revenue and accruals decreased by \$42.3 million, which includes a contribution to Teradyne's U.S. Qualified Pension Plan of approximately \$35.6 million. The inventory, accounts payable, deferred revenue and accrual balances were partially offset by a decrease of \$6.0 million in the accounts receivable balances primarily due to an decrease in days sales outstanding, based on annualized fourth quarter net revenues, from 59 days in 2003 to 54 days in 2004. Changes in operating assets and liabilities provided cash of \$18.9 million in 2003 primarily due to a decrease in inventory balances of \$56.3 million across all segments. Changes in operating assets and liabilities provided cash of \$203.1 million in 2002 primarily due to a decrease in inventory balances across all segments and the receipt of a tax refund in March of 2002.

Investing activities consist of purchases, sales and maturities of marketable securities, proceeds from the sale of businesses, proceeds from asset disposals, proceeds from the sale of product lines, cash paid for assets and purchases of capital assets. Capital expenditures increased by \$84.1 million in 2004 compared to 2003. Additions of internally constructed systems for use in marketing and engineering activities in the Semiconductor Test Systems segment accounted for approximately \$69.2 million of the increase in capital expenditures due to the recent introduction of the FLEX platform. The remainder of the increase was attributable to purchases of manufacturing and engineering equipment across Teradyne to support the increase in revenues in 2004 and continued investment in research and development. Capital expenditures were \$165.2 million in 2004, \$81.2 million in 2003, and \$76.4 million in 2002.

Financing activities include sales of Teradyne's common stock, as well as repayments of debt. During 2004 and 2003, repayments of long-term debt used cash of \$11.5 million and \$43.4 million, respectively as Teradyne repurchased a portion of its outstanding 3.75% Convertible Senior Notes in the third quarter of 2004, and prepaid its mortgage on its California properties in the third quarter of 2003. During 2004, 2003 and 2002, issuances of common stock under stock option and stock purchase plans generated \$30.3 million, \$100.5 million, and \$41.2 million, respectively.

On October 24, 2001, Teradyne issued \$400 million principal amount of 3.75% Convertible Senior Notes due 2006 (the "Notes") in a private placement and received net proceeds of \$389 million. The Notes are convertible at the option of the holders at a rate which is equivalent to a conversion price of approximately \$26.00 per share, which is equal to a conversion rate of approximately 38.4615 shares of common stock per \$1,000 principal amount of Notes. Teradyne began making annual interest payments of \$15 million, paid semi-annually, on the Notes commencing on April 15, 2002. The Notes are senior unsecured obligations of Teradyne that rank equally with Teradyne's existing and future unsecured and unsubordinated indebtedness. In the event of a change in control by which Teradyne merges with or sells substantially all of its assets to a third party, the holders of the Notes may be able to require Teradyne to redeem some or all of the Notes either in discounted Teradyne common stock or in cash. On February 8, 2002, the Securities and Exchange Commission declared effective a Registration Statement on Form S-3 covering both the Notes and the shares of common stock into which they can be converted.

On or after October 18, 2004, Teradyne may redeem the Notes in whole or in part at the prices set forth below. The redemption price, expressed as a percentage of principal amount, is as follows for the designated periods:

<u>Period</u>	<u>Redemption Price</u>
Beginning on October 18, 2004 and ending on October 14, 2005 .....	101.50%
Beginning on October 15, 2005 and ending on October 14, 2006 .....	100.75%

and thereafter equal to 100% of the principal amount. The Board of Directors of Teradyne has authorized management to repurchase up to \$100 million of the outstanding Notes in open market purchases at negotiated prices below 101.50. In the third quarter of 2004 and the first quarter of 2005, Teradyne repurchased \$8.5 million and \$20.0 million of the Notes, respectively. The decision to repurchase a portion of the Notes was based on the fair market value of the notes being below the redemption price during the period. Currently, management intends to repurchase the Notes on the open market through negotiated transactions when management believes that such price is beneficial to Teradyne. There are a number of factors that will affect the timing of when and the amount of the Notes that management may elect to repurchase, including the price of the available Notes, Teradyne's stock price, Teradyne's available cash and marketable securities, prevailing interest rates, and Teradyne's anticipated liquidity needs.

If, at some point in the future, Teradyne's stock price is greater than the conversion price of approximately \$26.00 per share, management may elect to convert a portion of the Notes into equity, to avoid the continuation of interest payments and to conserve capital. However, there can be no assurance that even if Teradyne's stock price is above the conversion price upon the notice of redemption that the Notes will convert into equity as Teradyne's stock price may drop between the redemption notification date and the actual redemption date. If this were to occur, Teradyne would be forced to redeem the portion of the Notes called into cash. There are a number of factors that will affect the timing and amount that management may elect to redeem including Teradyne's stock price, Teradyne's available cash and marketable securities and Teradyne's anticipated liquidity needs.

Teradyne believes its cash, cash equivalents and marketable securities balance of \$691.2 million will be sufficient to meet working capital and expenditure needs for at least the next twelve months. Teradyne plans to contribute approximately \$30.0 million in 2005 to Teradyne's U.S. Qualified Pension Plan which is currently under-funded. Inflation has not had a significant long-term impact on earnings.

### **Retirement Plans**

Teradyne's pension expense, which includes the U.S. Qualified Pension Plan, certain Qualified Plans for non-U.S. subsidiaries and a Supplemental Executive Defined Benefit plan, was approximately \$11.8 million for the year ended December 31, 2004, which was 0.73% of Teradyne's cost of revenue and operating expenses. The largest portion of Teradyne's 2004 pension expense was \$5.7 million for its U.S. Qualified Pension Plan, which is calculated based upon a number of actuarial assumptions, including an expected return on plan assets for Teradyne's U.S. Qualified Pension Plan assets of 8%. In developing the expected return on plan assets assumption, Teradyne evaluated input from its investment manager and pension consultants, including their review of asset class return expectations. Teradyne also considered its historical 15-year compounded return of 8.41% for the period ending December 31, 2003, which has been in excess of the broad equity and bond benchmark indices. Based on these historical returns, Teradyne believes that 8% was an appropriate rate to use for fiscal 2004. Teradyne will continue to evaluate its expected return on plan assets at least annually, and will adjust these returns as necessary.

The current asset allocation for Teradyne's U.S. Qualified Pension Plan is 48.1% invested in equity securities and 51.9% invested in fixed income securities, which is in accordance with the plan's asset allocation requirements. Teradyne's actual asset allocation as of December 31, 2004 was virtually identical to its asset allocation model. Teradyne's investment manager regularly reviews Teradyne's actual asset allocation and periodically rebalances the portfolio to ensure alignment with Teradyne's targeted allocations.

Teradyne bases its determination of pension expense or income on a market-related valuation of assets, which reduces year-to-year volatility. This market-related valuation recognizes investment gains or losses over a five-year period from the year in which they occur. Investment gains or losses for this purpose are the difference between the expected return calculated using the market-related value of assets and the actual return on assets. Since the market-related value of assets recognizes gains or losses over a five-year period, the future value of assets will be impacted as previously deferred gains or losses are recognized. As of December 31, 2004 in the U.S. Qualified Pension Plan Teradyne had cumulative losses of approximately \$6.2 million, which remain to be recognized in the calculation of the market-related value of assets. The discount rate that Teradyne utilized for determining future pension obligations for the U.S. Qualified Pension Plan is based on the Citigroup Pension Liability Index (formerly Salomon Brothers Pension Liability Index), which was at 5.68% at December 31, 2004, down from 6.00% at December 31, 2003. As a result, Teradyne selected 5.75% for its December 31, 2004 discount rate, which was down from 6% as of December 31, 2003. Each year Teradyne considers the Citigroup Pension Liability Index, along with other indices including the Moody's AA rated corporate bond yield and the Citigroup 10+ Year AAA/AA rate. Teradyne estimates that its pension expense for the U.S. Qualified Pension Plan will be approximately \$5.7 million, \$5.1 million and \$4.7 million in fiscal 2005, 2006, and 2007, respectively. The pension expense estimates are based on a 5.75% discount rate. Future actual pension expense will depend on future investment performance, changes in future discount rates and various other factors related to the employee population participating in Teradyne's pension plans.

Teradyne performed a sensitivity analysis, which expresses the estimated U.S. Qualified Pension Plan pension expense that would have resulted for the year ended December 31, 2004, if Teradyne changed either the discount rate or the expected return on plan assets.

<u>Return on Plan Assets</u>	<u>Discount Rate</u>		
	<u>5%</u>	<u>6%</u>	<u>7%</u>
	(in millions)		
7% .....	\$10.8	\$7.3	\$4.0
8% .....	9.3	5.7	2.4
9% .....	7.7	4.2	0.9

Teradyne's funding policy is to make contributions to the plans in accordance with local laws and to the extent that such contributions are tax deductible. The assets of these plans consist primarily of equity and fixed income securities. The value of Teradyne's U.S. Qualified Pension Plan assets has increased from \$121.6 million at December 31, 2003 to \$165.9 million at December 31, 2004. The investment performance returns and Teradyne contributions have decreased the deficit of Teradyne's U.S. Qualified Pension Plan, net of benefit obligations, from \$70.9 million at December 31, 2003 to \$37.9 million at December 31, 2004. During 2004, Teradyne contributed \$35.6 million to the U.S. Qualified Pension Plan. Teradyne plans to contribute approximately \$30.0 million in 2005 to this plan.

### Equity Compensation Plans

In addition to Teradyne's 1996 Employee Stock Purchase Plan discussed in "Note P: Stock Based Compensation," Teradyne maintains three equity compensation plans under which its equity securities are authorized for issuance to Teradyne's employees, directors and/or consultants:

- 1) 1991 Employee Stock Option Plan;
- 2) 1997 Employee Stock Option Plan; and
- 3) 1996 Non-Employee Director Stock Option Plan.

The purpose of these plans is to promote the interests of Teradyne by attracting and retaining the services of qualified and talented persons to serve as employees, directors and/or consultants of Teradyne. Except for the 1997 Employee Stock Option Plan, each of the foregoing plans was approved by Teradyne's shareholders.

The following table presents information about these plans as of December 31, 2004:

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under stock option compensation plans (excluding securities reflected in column(1))</u>
		(shares in thousands)	
Stock option plans approved by shareholders .....	5,427	\$22.73	2,856
Stock option plans not approved by shareholders(1) .....	<u>25,329</u>	<u>22.23</u>	<u>16,777</u>
Total .....	<u>30,756</u>	<u>\$22.31</u>	<u>19,633</u>

- (1) In connection with the acquisition of GenRad, Inc. in October 2001 (the "Acquisition"), Teradyne assumed the outstanding options granted under the GenRad, Inc. 1991 Equity Incentive Plan, the GenRad, Inc. 1991 Directors' Stock Option Plan and the GenRad, Inc. 1997 Non-Qualified Employee Stock Option Plan (collectively, the "GenRad Plans"). Upon the consummation of the Acquisition, these options became exercisable for shares of Teradyne common stock based on an exchange ratio of 0.1733 shares of Teradyne common stock for each share of GenRad common stock. No additional options will be granted pursuant to the GenRad Plans. As of December 31, 2004, there were outstanding options exercisable for an aggregate of 260 shares of Teradyne common stock pursuant to the GenRad Plans, with a weighted average exercise price of \$71.09 per share.

#### **1991 Employee Stock Option Plan (the "1991 Plan")**

Under the 1991 Plan, Teradyne is authorized to issue options which qualify as incentive stock options under the Internal Revenue Code of 1986, as amended ("ISOs") and non-qualified stock options ("NQOs"), up to a maximum of 30,000,000 shares of Teradyne common stock. ISOs may be granted only to employees of Teradyne and its subsidiaries and NQOs may be granted to employees, consultants and directors who are also employees of Teradyne. ISOs must be granted at an exercise price of at least 100% of fair market value of the common stock on the date of grant, and in the case of an employee owning more than 10% of the outstanding voting stock of Teradyne, the price per share must be at least 110% of the fair market value on the date of grant. No more than 200,000 NQOs may be granted at an exercise price less than fair market value. All other NQOs must be granted at an exercise price of at least 100% of fair market value on the date of grant. No employee may be granted options to purchase, in the aggregate, more than 300,000 shares of common stock under the 1991 Plan during any fiscal year. Teradyne's Compensation Committee administers the 1991 Plan and specifies at the time of grant of an option whether such option will be an ISO or NQO, the number of shares subject to the option, its exercise price and other pertinent terms, including vesting provisions. Generally, the term of each option may be for a period not exceeding ten years from the date of grant. Under certain circumstances, if an employee retires from Teradyne, such employee's option may expire prior to expiration of its stated term if such employee is engaged by a competitor of Teradyne. The 1991 Plan is a shareholder approved fixed accounting plan which expires in 2011.

#### **The 1997 Employee Stock Option Plan (the "1997 Plan")**

Under the 1997 Plan, Teradyne is authorized to issue ISOs to employees of Teradyne and its subsidiaries, and NQOs, stock awards and authorizations to purchase Teradyne common stock to employees, consultants or directors (provided that no options may be granted to non-employee directors) up to a maximum of 53,000,000 shares. ISOs must be granted at an exercise price of at least 100% of fair market value of the common stock on the date of grant and in the case of an employee owning more than 10% of the outstanding voting stock of Teradyne, the price per share must be at least 110% of the fair market value on the date of grant. No more than 400,000 NQOs may be granted at an exercise price less than fair market value. All other NQOs must be granted at an exercise price of at least 100% of fair market value on the date of grant. No employee may be granted an option to acquire more than 4,000,000 shares of common stock under the 1997 Plan during any fiscal year. Teradyne's Compensation Committee administers the 1997 Plan and specifies at the time of grant of an award, the pertinent terms of such award, including, if such award is an option, whether such option will be an ISO or NQO, the number of shares subject to the award, its exercise price and vesting provisions. Generally, the term of each award may be for a period not exceeding ten years from the date of grant. Under certain circumstances, if an employee retires from Teradyne, such employee's award may expire prior to expiration of its stated term if such employee is engaged by a competitor of Teradyne. The 1997 Plan is a fixed accounting plan which expires in 2007.

Options granted prior to September 2001 under the 1991 and 1997 Plans vest in equal installments over four years and have a maximum term of five years. Beginning in September 2001, options granted under the 1991 and 1997 Plans vest in equal installments over four years and have a maximum term of seven years. In addition, Teradyne made a one-time grant to all employees under the 1991 and 1997 Plans that vests over two years and has a term of seven years.

### **1996 Non-Employee Director Stock Option Plan (the "1996 Plan")**

Each non-employee director of Teradyne is entitled to participate in the 1996 Plan. Under the 1996 Plan, Teradyne is authorized to issue options to purchase up to a maximum of 1,600,000 shares of common stock. The 1996 Plan currently provides for the automatic grant (i) on the date of election, of an option to purchase 25,000 shares of Teradyne common stock to each non-employee director who becomes a member of the Board of Directors on or after January 1, 2004 ("Initial Grant"), (ii) on the first Monday in February in each year, beginning in 2004 and continuing throughout the Plan, of an option to purchase 15,000 shares of Teradyne common stock to each existing non-employee Director ("Annual Grant"); and (iii) on the first Monday in February in each year, beginning in 2005 and continuing throughout the Plan, of an option to purchase 30,000 shares of Teradyne common stock to the non-employee Chairman of the Board of Directors ("Chair") in lieu of the Annual Grant ("Annual Chair Grant"). The 1996 Plan was amended on January 24, 2005 to increase the automatic grant to a non-employee Chair from 15,000 to 30,000 shares of Teradyne common stock. Options granted under the 1996 Plan must be NQOs, shall be granted at 100% of the fair market value of the common stock on the date of grant. Options granted under the 1996 Plan prior to January 2002 expire five years following the date of grant and options granted thereafter expire seven years following the date of grant. Options granted under the 1996 Plan prior to February 5, 2001 become exercisable at the rate of 25% per year and options granted on or after February 5, 2001 are immediately exercisable. Teradyne's Compensation Committee administers the 1996 Plan. Generally, if an optionee ceases to be a director of Teradyne other than by reason of death, no further installments of his or her options become exercisable and the options terminate after three months. However, under certain circumstances, unless a board member becomes a director of a competitor of Teradyne, if the board member goes into government service or retires from the Board of Directors, such option may be exercised within its original terms. The 1996 Plan is a shareholder approved fixed accounting plan which expires in 2006.

### **Recently Issued Accounting Pronouncements**

In March 2004, the FASB ratified Emerging Issues Task Force ("EITF") Issue No. 03-1, "The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments" ("EITF 03-1"), but, in September 2004, delayed the recognition and measurement provisions of EITF 03-1. For reporting periods beginning after June 15, 2004, only the disclosure requirements for available-for-sale securities and cost method investments are required.

In December 2004, the FASB issued Statement of Financial Accounting Standards ("SFAS") No. 123R (revised 2004), "Share-Based Payment" ("SFAS 123R"). In interim or annual periods beginning after June 15, 2005, SFAS 123R would eliminate the ability to account for equity-based compensation using the intrinsic value-based method under APB 25. SFAS 123R requires companies' to calculate equity-based compensation expense for stock compensation awards based on the fair value of the equity instrument at the time of grant.

Under SFAS 123R, public companies are allowed to select from three alternative transition methods: the Modified Prospective Application, which allows for the adoption of SFAS 123R without restatement of prior interim periods in the year of adoption; the Modified Prospective Application with restatement of prior interim periods in the year of adoption; and the Modified Retrospective Application which allows companies to restate prior financial statements. Teradyne expects to adopt SFAS 123R beginning in the third quarter of 2005, as required, using the Modified Prospective method, and will not restate prior periods for the adoption of SFAS 123R.

Currently, Teradyne discloses pro forma net income (loss) and related pro forma net income (loss) per share in accordance with SFAS 123 and SFAS 148. Under SFAS 123R, equity-based compensation expense is required to be recognized in companies' financial statements. For the years ended December 31, 2004, 2003 and 2002, had SFAS 123R been effective, Teradyne would have recognized additional non-cash equity-based compensation expense of \$91.8 million, \$85.1 million, and \$110.3 million, respectively, applying the provisions of SFAS 123. Teradyne is considering accelerating the vesting of certain outstanding unvested "out of the money" stock options awarded to employees, officers and other eligible participants under Teradyne's various stock option plans. In addition, Teradyne is considering the use of other equity compensation vehicles including the use of restricted stock.

In November 2004, the FASB issued Statement of Financial Accounting Standards No. 151, "Inventory Costs, an amendment of ARB No. 43, Chapter 4" ("SFAS 151"). SFAS 151 modifies the accounting for abnormal inventory costs, and the manner in which companies allocate fixed overhead expenses to inventory. SFAS 151 is effective for inventory costs incurred during annual periods beginning after June 15, 2005. Teradyne does not expect SFAS 151 to have a material impact on its financial position and results of operations.

#### **Certain Factors That May Affect Future Results**

From time to time, information we provide, statements made by our employees or information included in our filings with the Securities and Exchange Commission (including this Form 10-K) contain statements that are not purely historical, but are forward looking statements, made under Section 21E of the Securities Exchange Act of 1934, which involve risks and uncertainties. In particular, forward looking statements made herein include projections, plans and objectives for our business, financial condition, operating results, future operations, or future economic performance, statements relating to the sufficiency of capital to meet working capital requirements, capital expenditures, expectations as to customer orders and demand for our products and statements relating to backlog, bookings and cancellations, gross margins and pricing considerations. These statements are neither promises nor guarantees but involve risks and uncertainties, both known and unknown, which could cause our actual future results to differ materially from those stated in any forward looking statements. Factors that may cause such differences include, but are not limited to, the factors discussed below. These factors, and others, are discussed from time to time in our filings with the Securities and Exchange Commission.

#### **Our Business Is Impacted by Worldwide Economic Cycles, Which Are Difficult to Predict.**

Capital equipment providers in the electronics and semiconductor industries, such as Teradyne, have, in the past, been negatively impacted by sudden slowdowns in the global economies, and resulting reductions in customer capital investments. Future slowdowns in global economies and reductions in customer capital investments, which may adversely impact our business, are difficult to predict.

#### **Acts of War, Terrorists Attacks and the Threat of Domestic and International Terrorist Attacks May Adversely Impact Our Business.**

Acts of war and terrorists attacks may cause damage or disruption to our employees, facilities, customers, suppliers and distributors which could have a material adverse effect on our business, results of operation or financial condition. As we sell and manufacture products both in the United States and internationally, the threat of future terrorist attacks could lead to changes in security and operations at those locations which could increase our operating costs and which may adversely affect our business. Such conflicts may also cause damage or disruption to transportation and communication systems. All of these conditions make it difficult for us, and our customers, to accurately forecast and plan future business activities and could have a material adverse effect on our business, financial condition and results of operations.

#### **Our Business is Dependent on the Current and Anticipated Market for Electronics, Which Historically Have Been Highly Cyclical.**

Our business and results of operations depend in significant part upon capital expenditures of manufacturers of semiconductors and other electronics, which in turn depend upon the current and anticipated market demand for those products. The market demand for electronics is impacted by economic slowdowns and the effects of hostile acts. Historically, the electronics and semiconductor industry has been highly cyclical with recurring periods of over-supply, which often have had a severe negative effect on demand for test equipment, including systems we manufacture and market. We believe that the markets for newer generations of electronic products such as those that we manufacture and market will also be subject to similar fluctuations. We are dependent on the timing of orders from our customers and the deferral or cancellation of previous customer orders could have an adverse effect on our results of operations. We cannot assure that the level of revenues or new orders for a calendar quarter will be sustained in subsequent quarters. In addition, any factor adversely affecting the electronics industry or particular segments within the electronics industry may adversely affect our business, financial condition and operating results.

**We Have Taken Measures to Address the Slowdown in the Market for Our Products Which Could Have Long-term Negative Effects on Our Business.**

During 2001, 2002, 2003, and 2004, we took measures to address slowdowns in the market for our products. In particular, we reduced our workforce, closed and/or sold facilities, discontinued certain product lines, implemented material cost reduction programs and reduced planned capital expenditures and expense budgets. Each measure we took to address such slowdowns could have long-term negative effects on our business by reducing our pool of technical talent, decreasing or slowing improvements in our products, increasing our debt, and making it more difficult to respond to customers or competitors, as the market and customer orders turn around.

**We May Not Be Able to Adequately Address a Rapid Increase in Customer Demand.**

Because we took measures in recent years to scale back operations and reduce expenses in response to decreased customer demand for products and services, we may not be able to satisfy a rapid increase in customer demand. Our ability to meet rapid increases in customer demand is also, to a certain extent, dependant upon the ability of our suppliers and contractors to meet increased product or delivery requirements, over which we have little or no control.

**Our Business May Be Adversely Impacted by Acquisitions Which May Affect Our Ability to Manage and Maintain Our Business.**

Since our inception, we have acquired a number of businesses. In the future, we may undertake additional acquisitions of businesses that complement our existing operations. Such past or future acquisitions could involve a number of risks, including:

- the diversion of the attention of management and other key personnel;
- the costs associated with and/or the inability to effectively integrate an acquired business into our culture, product and service delivery methodology and other standards, controls, procedures and policies;
- the inability to retain the management, key personnel and other employees of an acquired business;
- the inability to retain the customers of an acquired business;
- the possibility that our reputation will be adversely affected by customer satisfaction problems of an acquired business;
- potential known or unknown liabilities associated with an acquired business, including but not limited to regulatory, environmental and tax liabilities;
- significant underperformance of the acquired business relative to our expectations;
- the amortization of acquired identifiable intangibles, which may adversely affect our reported results of operations; and
- litigation which has or which may arise in the future in connection with such acquisitions.

For example, in connection with the August 2000 acquisition of each of Herco Technology Corp., a California company, and Perception Laminates, Inc., a California company, a complaint was filed on or about September 5, 2001 and is now pending in Federal District Court, San Diego, California, by the former owners of those companies naming as defendants Teradyne and two of our executive officers. This case is further described in "Part I, Item 3: Legal Proceedings" in this Form 10-K.

Additionally, in 2001, we were designated as a "potentially responsible party" ("PRP") at a clean-up site in Los Angeles, California. This claim arises out of our acquisition of Perception Laminates, Inc. in August 2000. Prior to that date, Perception Laminates had itself acquired certain assets of Alco Industries Inc. under an asset purchase agreement dated July 30, 1992. This matter is further described in "Part I, Item 3: Legal Proceedings" in this Form 10-K.

**We Currently Are and in the Future May Be Subject to Litigation that Could Have an Adverse Effect on Our Business.**

From time to time, we may be subject to litigation or other administrative and governmental proceedings that could require significant management time and resources and cause us to incur expenses and, in the event of an adverse decision, pay damages in an amount that could have a material adverse effect on our financial position or results of operations.

For example, on April 30, 2004, Hampshire Equity Partners II, L.P. ("HEP"), filed a complaint against Teradyne and Teradyne Connection Systems segment ("TCS") asserting fraud and negligence based claims, and a claim for intentional interference with economic opportunity. In the complaint, HEP alleges that it relied upon statements made by a representative of TCS to a HEP agent during its due diligence prior to investing \$55 million in Connector Services Corporation, aka AMAX Plating, Inc ("CSC"). HEP seeks to hold Teradyne and TCS responsible for its decision to invest in CSC and for the losses it has suffered upon the bankruptcy of CSC. HEP seeks damages in an unstated amount exceeding \$55 million. The case is currently pending in the U.S. District Court of the Southern District of New York. We believe we have meritorious defenses to the claims and will defend ourselves vigorously. Management does not believe that the outcomes of these claims will have a material adverse effect on our financial position or results of operations but there can be no assurance that any such claims would not have a material adverse effect on our financial position or results of operations. This case is further described in "Part I, Item 3: Legal Proceedings" in this Form 10-K.

**Our Business May be Adversely Impacted by Divestitures of Lines of Business Which May Affect Our Ability to Manage and Maintain Our Business.**

Since our inception, we have divested certain lines of business. In the future, we may undertake additional such divestitures. Such past or future divestitures could involve a number of risks, including:

- the diversion of the attention of management and other key personnel;
- disruptions and other effects caused by the divestiture of a line of business on our culture, product and service delivery methodology and other standards, controls, procedures and policies;
- customer satisfaction problems caused by the loss of a divested line of business;
- restructuring, inventory and other charges which may affect our results of operations; and
- the decreased diversification of our product lines caused by the divestiture of a line of business which may make our operating results subject to increased market fluctuations.

**If We Are Unable to Protect Our Intellectual Property, We May Lose a Valuable Asset or May Incur Costly Litigation to Protect Our Rights.**

Our products incorporate technology that we protect in several ways, including patents, copyrights, trade secrets and by contract ("IP"). However, even with these protections, our IP may still be challenged, invalidated or subject to other infringement actions. While we believe that our IP has value in the aggregate, no single element of our IP is in itself essential. If a significant portion of our IP is invalidated or ineffective, our business could be materially adversely affected. In addition, we receive notifications from time to time that we may be in violation of patents held by others. An assertion of patent infringement against us, if successful, could have a material adverse effect on our ability to sell our products, or require a significant use of management resources and necessitate a lengthy and expensive defense which could adversely affect our operating results.

**If We Fail to Develop New Technologies to Adapt to Our Customers' Needs and if Our Customers Fail to Accept Our New Products, Our Revenues Will Be Adversely Affected.**

We believe that our technological position depends primarily on the technical competence and creative ability of our engineers. In a rapidly evolving market, such as ours, the development of new technologies,

commercialization of those technologies into products and market acceptance and customer demand for those products are critical to our success. Successful product development and introduction depends upon a number of factors, including:

- new product selection;
- ability to meet customer requirements;
- development of competitive products by competitors;
- timely and efficient completion of product design;
- timely and efficient implementation of manufacturing; and
- assembly processes and product performance at customer locations.

#### **We Are Subject to Intense Competition.**

We face significant competition throughout the world in each of our reportable segments. Some of our competitors have substantial financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. We also face competition from internal suppliers at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of our products. Moreover, increased competitive pressure could lead to intensified price based competition, which could materially adversely affect our business, financial condition and results of operations.

#### **We Are Subject to Risks of Operating Internationally.**

A significant portion of our total revenue is derived from customers outside the United States. Our international sales and operations are subject to significant risks and difficulties, including:

- unexpected changes in legal and regulatory requirements and in policy changes affecting international markets;
- changes in tariffs and exchange rates;
- social, political and economic instability, acts of terrorism and international conflicts;
- difficulties in accounts receivable collection;
- cultural differences in the conduct of business;
- difficulties in staffing and managing international operations;
- potentially adverse tax consequences; and
- compliance with customs regulations.

In addition, an increasingly large portion of our products are sourced or manufactured in foreign locations, including China, and a large portion of the devices our products test are fabricated and tested by foundries and subcontractors in Taiwan, Singapore, China and other parts of Asia. As a result, we are subject to a number of economic and other risks, particularly during times of political or financial instability in these regions. Disruption of manufacturing or supply sources in these international locations could materially adversely impact our ability to fill customer orders and potentially result in lost business.

#### **Our Business May Suffer if We Are Unable to Attract and Retain Key Employees.**

Competition for employees with skills we require is intense in the high technology industry. Our success will depend on our ability to attract and retain key technical employees. The loss of one or more key or other employees, our inability to attract additional qualified employees, or the delay in hiring key personnel could each have a material adverse effect on our business, results of operations or financial condition.

**If Our Suppliers do not Meet Product or Delivery Requirements, We Could Have Reduced Revenues and Earnings.**

Certain components, including semiconductor chips, may be in short supply from time to time because of high industry demand or the inability of some vendors to consistently meet our quality or delivery requirements. Approximately 30% of material purchases require some custom work where having multiple suppliers would be cost prohibitive. If any of our suppliers were to cancel contracts or commitments or fail to meet the quality or delivery requirements needed to satisfy customer orders for our products, we could lose time-sensitive customer orders and have significantly decreased quarterly revenues and earnings, which would have a material adverse effect on our business, results of operations and financial condition. In addition, we rely on contract manufacturers for certain subsystems used in our products, and our ability to meet customer orders for those products depends upon the timeliness and quality of the work performed by these subcontractors, over whom we do not exercise any control.

We are also dependent on the financial strength of our suppliers and may be subject to litigation arising from our relationships with suppliers and others. There can be no assurance that the loss of suppliers either as a result of bankruptcy or otherwise will not have a material adverse effect on our business, results of operations or financial condition.

**We May Incur Significant Liabilities if We Fail to Comply With Environmental Regulations.**

We are subject to both domestic and international environmental regulations and statutory strict liability relating to the use, storage, discharge, site cleanup and disposal of hazardous chemicals used in our manufacturing processes. If we fail to comply with present and future regulations, or are required to perform site remediation, we could be subject to future liabilities or the suspension of production. Present and future regulations may also:

- restrict our ability to expand facilities;
- require us to acquire costly equipment; or
- require us to incur other significant costs and expenses.

Pursuant to present regulations and agreements, we are conducting groundwater and subsurface assessment and monitoring and are implementing remediation and corrective action plans for facilities located in California, Massachusetts and New Hampshire which are no longer conducting manufacturing operations. As of December 31, 2004, we have not incurred material costs as result of the monitoring and remediation steps taken at the California, Massachusetts and New Hampshire sites.

On January 27, 2003, the European Union adopted the following directives: (i) the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (the "RoHS Directive"); and (ii) the Waste Electrical and Electronic Equipment Directive (the "WEEE Directive"). Both the RoHS Directive and the WEEE Directive will alter the type and manner in which electronic equipment is imported, sold and handled in the European Union. Ensuring compliance with the RoHS Directive and the WEEE Directive and integrating compliance activities with our suppliers could result in additional costs and disruption to operations and logistics and thus, could have a negative impact on the business, operations and financial condition. The RoHS Directive and the WEEE Directive will become effective on July 6, 2006 and August 13, 2005, respectively.

**We Have Substantially Increased Our Indebtedness.**

On October 24, 2001, we completed a private placement of \$400 million principal amount of 3.75% Convertible Senior Notes (the "Notes") due October 15, 2006 and received net proceeds of \$389 million. As a result, we have incurred approximately \$400 million principal amount of additional indebtedness, substantially increasing our ratio of debt to total capitalization. The level of our indebtedness, among other things, could:

- make it difficult to make payments on our debt and other obligations;

- make it difficult to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;
- require the dedication of a substantial portion of any cash flow from operations to service for indebtedness, thereby reducing the amount of cash flow available for other purposes, including capital expenditures;
- limit our flexibility in planning for, or reacting to changes in our business and the industries in which we compete;
- place us at a possible competitive disadvantage with respect to less leveraged competitors and competitors that have better access to capital resources; and
- make us more vulnerable in the event of a downturn in our business.

During the year ended December 31, 2004, and in the first quarter of 2005, Teradyne took steps to reduce its indebtedness, including repurchasing a total of \$28.5 million of the Notes on the open market pursuant to the Board of Directors authorization given to management to repurchase up to \$100 million of the outstanding Notes in open market purchases at negotiated prices below 101.50. There can be no assurance that we will be able to meet our debt service obligations, including our obligations under the Notes.

**We May Not Be Able to Satisfy Certain Obligations in the Event of a Change in Control.**

The indenture governing the Notes contains provisions that apply to a change in control of Teradyne. If a "change in control" occurs, the holders of the Notes have the right to require us to repurchase all of the Notes not previously called for redemption. The price that we are required to pay is 100% of the principal amount of the Notes to be repurchased, together with interest accrued but unpaid to, but excluding, the repurchase date. At our option and subject to the satisfaction of certain conditions, instead of paying the repurchase price in cash, we may pay the repurchase price in common stock valued at 95% of the average of the closing prices of common stock for the five trading days immediately preceding and including the third trading day prior to the repurchase date. If we are required to repurchase the Notes, there is no guarantee that we will have enough funds to pay such amounts.

As a result, a change in control could have a material adverse effect on our business, results of operations or financial condition.

**We May Not Be Able to Pay Our Debt and Other Obligations.**

If our cash flow is inadequate to meet our obligations, we could face substantial liquidity problems. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments on the Notes or certain of our other obligations, we would be in default under the terms thereof, which would permit the holders of those obligations to accelerate their maturity and also could cause defaults under future indebtedness we may incur. Any such default could have a material adverse effect on our business, prospects, financial position and operating results. In addition, we cannot assure that we would be able to repay amounts due in respect of the Notes if those obligations were to be accelerated following the occurrence of any other event of default as defined in the instruments creating those obligations. Moreover, we cannot assure that we will have sufficient funds or will be able to arrange for financing to pay the principal amount due on the Notes at maturity.

**We May Need Additional Financing, Which Could Be Difficult to Obtain.**

We expect that our existing cash and marketable securities and cash generated from operations will be sufficient to meet our cash requirements to fund operations and expected capital expenditures for the next twelve months. However, we have a finite amount of cash and in the event we may need to raise additional funds, due to losses or other reasons, we cannot be certain that we will be able to obtain such additional financing on favorable terms, if at all. Further, if we issue additional equity securities, stockholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of existing holders of common stock. Future financings may place restrictions on how we operate our business. If we cannot raise funds on acceptable terms, if and when needed, we may not be able to develop or enhance our products and services, take advantage of future opportunities, grow our business or respond to competitive pressures, which could seriously harm our business.

**We Will Be Required to Account for Options Under Our Employee Stock Plans as a Compensation Expense, Which Will Adversely Affect Our Operating Results**

There has been an increasing public debate about the proper accounting treatment for employee stock options. We currently disclose pro forma compensation expense quarterly and annually by calculating the grants' fair value and disclosing the impact on net income (loss) and net income (loss) per share in a footnote to the consolidated financial statements. SFAS 123R or any other future laws and regulations requiring us to record the fair value of all stock options as compensation expense in our consolidated statement of operations will adversely affect operating results. Note B: "Accounting Policies," of the consolidated financial statements reflects the impact that such a change in accounting treatment would have had on net income (loss) and net income (loss) per share if it had been in effect during the year ended December 31, 2004. Included in Item 7: "Management's Discussion and Analysis of Financial Condition and Results of Operations," are additional stock-based compensation disclosures.

**Provisions of Our Charter and By-Laws and Massachusetts Law Make a Takeover of Teradyne More Difficult.**

Our basic corporate documents, our stockholder rights plan and Massachusetts law contain provisions that could discourage, delay or prevent a change in control, even if a change in control might be regarded as beneficial to some or all of our stockholders.

**Our Operating Results Are Likely to Fluctuate Significantly.**

Our annual operating results are affected by a wide variety of factors that could materially adversely affect revenues and profitability.

The following factors set out below are expected to impact future operations:

- competitive pressures on selling prices;
- our ability to introduce and the market acceptance of new products planned for 2005 and beyond;
- changes in product revenue mix resulting from changes in customer demand;
- the level of orders received which can be shipped in a quarter resulting from the tendency of customers to wait until late in a quarter to commit to purchase due to capital expenditure approvals and constraints occurring at the end of a quarter, or the hope of obtaining more favorable pricing from a competitor seeking the business;
- engineering and development investments relating to new product introductions in 2005 and beyond, and the expansion of manufacturing and engineering operations in Asia;
- the ability of our suppliers and subcontractors to meet product quality or delivery requirements needed to satisfy customer orders for our products, especially if product demand increases rapidly;
- provisions for excess and obsolete inventory relating to the lack of demand for and the discontinuance of products; and
- impairment charges for certain long-lived assets.

In particular, due to the introduction of a number of new, complex test systems in 2003 and 2004 and the planned introduction of other systems in 2005 and beyond, there can be no assurance that we will not experience delays in shipment of our products or that our products will achieve customer acceptance.

As a result of the foregoing and other factors, we have and may continue to experience material fluctuations in future operating results on a quarterly or annual basis which could materially and adversely affect our business, financial condition, operating results and stock price.

### **We have Significant Guarantees and Indemnification Obligations**

From time to time we make guarantees to customers regarding the performance of our products, guarantee certain indebtedness obligations of our subsidiary companies and have agreed to provide indemnification to our officers, directors, employees and agents, to the extent permitted by law, arising from certain events or occurrences while the officer, director, employee or agent, is or was serving at our request in such capacity. If we become liable under any of these obligations, it could materially and adversely affect our business, financial condition and operating results. For additional information regarding "Guarantees and Indemnification Obligations" see Part I, Note J: "Commitments and Contingencies" in this Form 10-K. In addition to the guarantee and indemnification obligations set forth in this 10-K, Teradyne occasionally guarantees the performance obligations and responsibilities of its subsidiary and affiliate companies.

### **Item 7a: Quantitative and Qualitative Disclosures About Market Risks**

#### **Concentration of Credit Risk**

Financial instruments which potentially subject Teradyne to concentrations of credit risk consist principally of cash investments, forward currency contracts and accounts receivable. Teradyne maintains cash investments primarily in U.S. Treasury and government agency securities and corporate debt securities, rated AA or higher, which have minimal credit risk. Teradyne places forward currency contracts with high credit-quality financial institutions in order to minimize credit risk exposure. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of geographically dispersed customers. Teradyne performs ongoing credit evaluations of its customers' financial condition and does not require collateral to secure accounts receivable.

#### **Exchange Rate Risk Management**

Teradyne regularly enters into foreign currency forward contracts to hedge the value of our net monetary assets in European and Japanese currencies. These foreign currency forward contracts have maturities of less than one year. These contracts are used to reduce Teradyne's risk associated with exchange rate movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. In addition, we periodically hedge anticipated cash flow transactions with foreign currency forward contracts. The gains and losses on these contracts are deferred and recognized in the same period as the hedged transaction is recognized in income. Teradyne does not engage in currency speculation.

We performed a sensitivity analysis assuming a hypothetical 10% fluctuation in foreign exchange rates to the hedging contracts and the underlying exposures described above. As of December 31, 2004 and 2003, the analysis indicated that these hypothetical market movements would not have a material effect on our consolidated financial position, results of operations or cash flows.

#### **Interest Rate Risk Management**

Teradyne is exposed to potential loss due to changes in interest rates. The principal interest rate exposure is to changes in domestic interest rates. Investments with interest rate risk include short and long-term marketable securities. Debt with interest rate risk includes the fixed rate convertible debt and mortgages.

In order to estimate the potential loss due to interest rate risk, a 10% fluctuation in interest rates was assumed. Since the Notes were "out-of-the-money" at year-end, they were treated as a fixed rate debt security and the analysis assumes that the entire principal amount is repaid in full at maturity and the exercise of the embedded equity option is ignored. Market risk for the short and long-term marketable securities was estimated as the potential change in the fair value resulting from a hypothetical change in interest rates for securities contained in the investment portfolio. On these bases, the potential change in fair value from changes in interest rates is \$0.9 million and \$2.3 million as of December 31, 2004 and 2003, respectively.

**Item 8: Financial Statements and Supplementary Data**

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Teradyne, Inc.:

We have completed an integrated audit of Teradyne, Inc.'s 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

*Consolidated financial statements and financial statement schedule*

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Teradyne, Inc. and its subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

*Internal control over financial reporting*

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control – Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting

includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PRICEWATERHOUSECOOPERS LLP

Boston, Massachusetts  
March 15, 2005

**TERADYNE, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
**December 31, 2004 and 2003**

	<u>2004</u>	<u>2003</u>
	(in thousands, except per share information)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents .....	\$ 209,147	\$ 228,444
Marketable securities .....	75,431	60,974
Accounts receivable, less allowance for doubtful accounts of \$5,737 and \$5,968 in 2004 and 2003, respectively .....	223,491	229,532
Inventories		
Parts .....	140,094	109,538
Assemblies in process .....	122,902	105,396
	262,996	214,934
Prepayments and other current assets .....	34,761	35,393
<b>Total current assets</b> .....	<b>805,826</b>	<b>769,277</b>
Property, plant and equipment:		
Land .....	48,112	50,503
Buildings and improvements .....	320,918	328,468
Machinery and equipment .....	948,840	894,924
Construction in progress .....	31,627	31,359
<b>Total</b> .....	<b>1,349,497</b>	<b>1,305,254</b>
Less: Accumulated depreciation .....	(802,422)	(760,885)
<b>Net property, plant and equipment</b> .....	<b>547,075</b>	<b>544,369</b>
Marketable securities .....	406,615	296,618
Goodwill .....	116,176	118,203
Intangible and other assets .....	46,870	56,895
<b>Total assets</b> .....	<b>1,922,562</b>	<b>\$1,785,362</b>
<b>LIABILITIES</b>		
Current liabilities:		
Notes payable—banks .....	\$ 4,826	\$ 7,272
Current portion of long-term debt .....	321	310
Accounts payable .....	62,006	74,097
Accrued employees' compensation and withholdings .....	106,298	91,244
Deferred revenue and customer advances .....	30,399	25,391
Other accrued liabilities .....	60,970	75,125
Accrued income taxes .....	11,738	7,376
<b>Total current liabilities</b> .....	<b>276,558</b>	<b>280,815</b>
Pension liability .....	69,187	93,878
Long-term other accrued liabilities .....	44,321	53,441
Convertible senior notes .....	391,500	400,000
Other long-term debt .....	7,432	7,658
<b>Total liabilities</b> .....	<b>788,998</b>	<b>835,792</b>
Commitments and contingencies (Note J)		
<b>SHAREHOLDERS' EQUITY</b>		
Common stock, \$0.125 par value, 1,000,000 shares authorized, 194,253 and 218,628 shares issued at December 31, 2004 and 2003, respectively and 194,253 and 191,973 shares outstanding at December 31, 2004 and 2003, respectively .....	24,282	27,329
Additional paid-in capital .....	768,875	1,294,661
Treasury stock, at cost, 26,655 shares at December 31, 2003 .....	—	(557,057)
Accumulated other comprehensive loss .....	(61,313)	(51,846)
Retained earnings .....	401,720	236,483
<b>Total shareholders' equity</b> .....	<b>1,133,564</b>	<b>949,570</b>
<b>Total liabilities and shareholders' equity</b> .....	<b>\$1,922,562</b>	<b>\$1,785,362</b>

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

TERADYNE, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2004	2003	2002
	(in thousands, except per share amounts)		
Net revenue:			
Products .....	\$1,554,847	\$1,115,888	\$ 992,127
Services .....	237,033	236,979	230,109
Total net revenue .....	1,791,880	1,352,867	1,222,236
Cost of revenues:			
Cost of products .....	903,496	798,748	829,172
Cost of services .....	164,511	155,220	160,395
Gross profit .....	723,873	398,899	232,669
Operating expenses:			
Engineering and development .....	262,000	254,600	293,922
Selling and administrative .....	268,576	249,464	290,376
Restructuring and other charges .....	5,359	71,284	125,240
Goodwill impairment .....	—	—	78,936
Gain on sale of a business .....	(865)	—	—
	535,070	575,348	788,474
Income (loss) from operations .....	188,803	(176,449)	(555,805)
Interest income .....	15,387	14,013	16,953
Interest expense .....	(18,752)	(20,883)	(21,783)
Other income and expense, net .....	2,536	(2,874)	(310)
Income (loss) before income taxes .....	187,974	(186,193)	(560,945)
Provision for income taxes .....	22,737	7,800	157,524
Net income (loss) .....	\$ 165,237	\$ (193,993)	\$ (718,469)
Net income (loss) per common share—basic .....	\$ 0.85	\$ (1.03)	\$ (3.93)
Shares used in net income (loss) per common share—basic .....	194,048	187,845	182,861
Net income (loss) per common share—diluted .....	0.84	(1.03)	(3.93)
Shares used in net income (loss) per common share—diluted .....	197,432	187,845	182,861

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

**TERADYNE, INC.**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**  
**Years Ended December 31, 2004, 2003 and 2002**

	Shares		Common Stock Par Value	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity	Comprehensive Income (Loss)
	Issued	Reacquired							
	(in thousands)								
Balance, December 31, 2001	207,774	26,655	\$25,972	\$1,154,266	\$(557,057)	\$ (7,742)	\$1,148,945	\$1,764,384	
Issuance of stock to employees under benefit plans	2,077		259	40,980				41,239	
Comprehensive loss:									
Net loss							(718,469)	(718,469)	\$(718,469)
Foreign currency translation adjustment						(104)		(104)	(104)
Reclassification adjustment for loss on marketable securities included in net loss net of applicable tax of \$0						942		942	942
Unrealized gains on investments, net of applicable tax of \$0						829		829	829
Additional minimum pension liability, net of applicable tax of \$0						(60,348)		(60,348)	(60,348)
Total comprehensive loss									\$(777,150)
Balance, December 31, 2002	209,851	26,655	\$26,231	\$1,195,246	\$(557,057)	\$(66,423)	\$ 430,476	\$1,028,473	
Issuance of stock to employees under benefit plans	8,777		1,098	99,415				100,513	
Comprehensive loss:									
Net loss							(193,993)	(193,993)	\$(193,993)
Foreign currency translation adjustment						663		663	663
Reclassification adjustment for gain on marketable securities included in net loss net of applicable tax of \$0						(1,776)		(1,776)	(1,776)
Unrealized gains on investments, net of applicable tax of \$0						2,340		2,340	2,340
Additional minimum pension liability, net of applicable tax of \$0						13,350		13,350	13,350
Total comprehensive loss									\$(179,416)
Balance, December 31, 2003	218,628	26,655	\$27,329	\$1,294,661	\$(557,057)	\$(51,846)	\$ 236,483	\$ 949,570	
Issuance of stock to employees under benefit plans	2,316		289	29,962				30,251	
Return of escrowed shares		36			(2,027)			(2,027)	
Conversion of treasury stock to unissued shares	(26,691)	(26,691)	(3,336)	(555,748)	559,084				
Comprehensive income:									
Net income							165,237	165,237	\$ 165,237
Foreign currency translation adjustment						813		813	813
Reclassification adjustment for gain on marketable securities included in net income net of applicable tax of \$0						(2,404)		(2,404)	(2,404)
Unrealized loss on cash flow hedge						(275)		(275)	(275)
Unrealized losses on investments, net of applicable tax of \$0						(5,339)		(5,339)	(5,339)
Additional minimum pension liability, net of applicable tax of \$0						(2,262)		(2,262)	(2,262)
Total comprehensive income									\$ 155,770
Balance, December 31, 2004	194,253	—	\$24,282	\$ 768,875	\$ —	\$(61,313)	\$ 401,720	\$1,133,564	

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

TERADYNE, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2004	2003	2002
	(in thousands)		
Cash flows from operating activities:			
Net income (loss) .....	\$ 165,237	\$(193,993)	\$(718,469)
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:			
Depreciation .....	118,579	147,289	151,811
Amortization .....	5,729	5,199	7,878
Gain on sale of business .....	(865)	—	—
Impairment of long-lived assets .....	810	29,403	76,994
Impairment of goodwill .....	—	—	78,936
(Gain) loss on sale of product lines .....	(1,362)	8,048	—
Provision for doubtful accounts .....	—	1,091	1,073
Provision for inventory reserves .....	11,335	16,569	39,021
Deferred income tax (credit) provision .....	(612)	(2,013)	145,326
Other non-cash items, net .....	879	3,693	10,094
Changes in operating assets and liabilities, net of businesses and product lines sold and acquired:			
Accounts receivable .....	6,041	(58,348)	(6,281)
Inventories .....	(16,040)	56,298	93,690
Other assets .....	2,992	(884)	91,359
Accounts payable, deferred revenue and accruals .....	(42,257)	24,025	16,025
Accrued income taxes .....	4,362	(2,211)	8,295
Net cash provided by (used for) operating activities .....	<u>254,828</u>	<u>34,166</u>	<u>(4,248)</u>
Cash flows from investing activities:			
Investments in property, plant and equipment .....	(165,245)	(81,185)	(76,359)
Proceeds from sale of business .....	865	—	—
Proceeds from asset disposals .....	—	34,521	—
Proceeds from sale of product lines .....	1,259	2,114	—
Purchases of held-to-maturity marketable securities .....	—	—	(139,716)
Maturities of held-to-maturity marketable securities .....	—	29,905	139,697
Purchases of available-for-sale marketable securities .....	(367,037)	(290,409)	(255,161)
Proceeds from sales and maturities of available-for-sale marketable securities .....	237,249	190,689	237,741
Cash paid for acquisition of assets .....	—	—	(8,392)
Net cash used by investing activities .....	<u>(292,909)</u>	<u>(114,365)</u>	<u>(102,190)</u>
Cash flows from financing activities:			
Payments of long-term debt and notes payable .....	(11,467)	(43,391)	(871)
Issuance of common stock under stock option and stock purchase plans .....	30,251	100,513	41,239
Net cash provided by financing activities .....	<u>18,784</u>	<u>57,122</u>	<u>40,368</u>
Decrease in cash and cash equivalents .....	(19,297)	(23,077)	(66,070)
Cash and cash equivalents at beginning of year .....	228,444	251,521	317,591
Cash and cash equivalents at end of year .....	<u>\$ 209,147</u>	<u>\$ 228,444</u>	<u>\$ 251,521</u>
Supplementary disclosure of cash flow information:			
Cash paid (received) during the year for:			
Interest .....	\$ 16,658	\$ 18,703	\$ 18,963
Income taxes paid (received) .....	\$ 13,963	\$ 7,124	\$ (88,823)

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

## TERADYNE, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### A. THE COMPANY

Teradyne, Inc. is a leading supplier of automatic test equipment and a leading provider of high performance interconnection systems.

Teradyne's automatic test equipment products include systems that:

- test semiconductors ("Semiconductor Test Systems");
- test and inspect circuit-boards ("Assembly Test Systems");
- diagnose, program and test automotive electronics systems ("Diagnostic Solutions"); and
- test voice and broadband access networks ("Broadband Test Systems").

Teradyne's interconnection systems products and services ("Connection Systems") include:

- high bandwidth backplane assemblies; and
- high density connectors

Broadband Test Systems and Diagnostic Solutions have been combined into "Other Test Systems" for purposes of Teradyne's segment reporting.

#### B. ACCOUNTING POLICIES

##### Basis of Presentation

The consolidated financial statements include the accounts of Teradyne and its wholly-owned subsidiaries. All significant intercompany balances and transactions are eliminated. Certain prior years' amounts were reclassified to conform to the current year presentation.

##### Preparation of Financial Statements and Use of Estimates

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to inventories, investments, goodwill, intangible and other long-lived assets, bad debts, income taxes, pensions, warranties, contingencies and litigation. Management bases its estimates on historical experience and on appropriate and customary assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

##### Revenue Recognition

In accordance with the guidance provided by the Securities and Exchange Commission's Staff Accounting Bulletin No. 104, "Revenue Recognition," Teradyne recognizes revenue when there is persuasive evidence of an arrangement, title and risk of loss have passed, delivery has occurred or the services have been rendered, the sales price is fixed or determinable and collection of the related receivable is reasonably assured. Title and risk of loss generally pass to Teradyne's customers upon shipment. In circumstances where either title or risk of loss pass upon destination, acceptance or cash payment, Teradyne defers revenue recognition until such events occur.

For equipment that includes hardware and software that is incidental to the product, revenue is recognized upon shipment provided that customer acceptance criteria can be demonstrated prior to shipment. Certain

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

B. ACCOUNTING POLICIES—(Continued)

contracts require Teradyne to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, or in the case of new products, revenue is deferred until customer acceptance has been received. For multiple element arrangements, Teradyne defers the greater of the fair value of any undelivered elements of the contract or the portion of the sales price which is not payable until the undelivered elements are delivered. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered item must be considered probable and substantially in the control of Teradyne. Teradyne also defers the portion of the sales price that is not due until acceptance, which represents deferred profit. Fair value is the price charged when the element is sold separately. Teradyne's post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five to fifteen days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customer's ability to use the product. Teradyne defers revenue for the fair value of installation and training. Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with FASB Technical Bulletin 90-1. Teradyne's products are generally subject to warranty and related costs are provided for in cost of revenue when product revenue is recognized. Teradyne classifies shipping and handling costs in cost of revenue. Service revenue is recognized over the contractual period or as the services are performed.

Connection Systems revenue is generally recognized upon shipment according to the shipping terms of the arrangement as there is no installation required and there are no contractual acceptance requirements.

Teradyne does not provide its customers with contractual rights of return for any of its products.

For transactions involving the sale of software which is not incidental to the product, revenue is recognized in accordance with American Institute of Certified Public Accountants ("AICPA") Statement of Position No. 97-2 ("SOP 97-2"), "Software Revenue Recognition," as amended by SOP No. 98-9 "Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions." Teradyne recognizes revenue when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable and collectibility is probable. In instances where an arrangement contains multiple elements, revenue is deferred related to the undelivered elements to the extent that vendor-specific objective evidence of fair value ("VSOE") exists for such elements. In instances where VSOE does not exist for one or more of the undelivered elements of an arrangement, all revenue related to the arrangement is deferred until all elements have been delivered. VSOE is the price charged when the element is sold separately. Revenue for the separate elements is only recognized where the functionality of the undelivered element is not essential to the delivered element.

For certain contracts eligible for contract accounting under SOP No. 81-1 "Accounting for Performance of Construction-Type and Certain Production-Type Contracts," revenue is recognized using the percentage-of-completion accounting method based upon the percentage of incurred costs to estimated total costs. These arrangements require significant production, modification or customization. In all cases, changes to total estimated costs and anticipated losses, if any, are recognized in the period in which they are determined. With respect to contract change orders, claims or similar items, judgment must be used in estimating related amounts and assessing the potential for realization. Such amounts are only included in the contract value when they can be reliably estimated and realization is reasonably assured, generally upon receipt of a customer approved change order. As of December 31, 2004 and 2003, Teradyne had \$13.3 million and \$5.4 million in unbilled amounts on long-term contracts included in accounts receivable, respectively. These amounts will be billed on a milestone basis in accordance with contractual terms.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

B. ACCOUNTING POLICIES—(Continued)

**Inventories**

Inventories, which include materials, labor, and manufacturing overhead, are stated at the lower of cost (first-in, first-out basis) or net realizable value. On a quarterly basis, Teradyne uses consistent methodologies to evaluate all inventory for net realizable value. Teradyne records a provision for excess and obsolete inventory when such a writedown is identified through the quarterly review process. The inventory valuation is based upon assumptions about future demand, product mix and possible alternative uses.

**Property, Plant and Equipment**

Property, plant and equipment are stated at cost and depreciated over the estimated useful lives of the assets. Leasehold improvements and major renewals are capitalized and included in property, plant and equipment accounts while expenditures for maintenance and repairs and minor renewals are charged to expense. When assets are retired, the assets and related allowances for depreciation and amortization are removed from the accounts and any resulting gain or loss is reflected in operations.

Teradyne provides for depreciation of its assets principally on the straight line method with the cost of the assets being charged to expense over their useful lives as follows:

Buildings	40 years
Building improvements	5 to 10 years
Leasehold improvements	3 to 10 years
Furniture and fixtures	10 years
Test systems manufactured internally	6 years
Machinery and equipment	3 to 5 years
Software	3 to 5 years

Test systems manufactured internally are used by Teradyne for manufacturing and support of its customers. Teradyne depreciates the test systems manufactured internally over a six-year life to cost of revenues. Teradyne often sells internally manufactured test equipment to customers. Upon the sale of the internally manufactured test system, the net book value of the system is transferred to inventory and expensed as cost of revenues. The net book value of internally manufactured test systems sold in the years ended December 31, 2004, 2003 and 2002 was \$43.4 million, \$15.1 million and \$1.7 million, respectively.

**Goodwill, Intangible and Long-Lived Assets**

Teradyne accounts for its goodwill and intangible assets in accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets." Intangible assets are amortized over their estimated useful economic life using the straight-line method and are carried at cost less accumulated amortization. Goodwill is assessed for impairment at least annually in the fourth quarter, on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess.

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**B. ACCOUNTING POLICIES—(Continued)**

In accordance with SFAS No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets," Teradyne reviews long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows to the recorded value of the asset. If an impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis. The cash flow estimates used to determine the impairment, if any, contain management's best estimates using appropriate assumptions and projections at that time.

**Engineering and Development Costs**

Teradyne's products are highly technical in nature and require a large and continuing engineering and development effort. Software development costs incurred prior to the establishment of technological feasibility are charged to expense. Software development costs incurred subsequent to the establishment of technological feasibility are capitalized until the product is available for release to customers. To date, the period between achieving technological feasibility and general availability of the product has been short and software development costs eligible for capitalization have not been material. Engineering and development costs are expensed as incurred.

**Advertising Costs**

Teradyne expenses all advertising costs as incurred. Advertising costs were \$3.7 million, \$3.3 million and \$6.5 million in 2004, 2003 and 2002, respectively.

**Product Warranty**

Teradyne generally provides a one-year warranty on its products commencing upon installation. A provision is recorded to cost of revenues for estimated warranty expense based upon historical experience. Related costs are charged to the warranty accrual as incurred. The balance below is included in other accrued liabilities.

	<b>Balance</b>
	<b>(in thousands)</b>
Balance at December 31, 2002 .....	\$ 9,087
Accruals for warranties issued during the period .....	17,550
Settlements made during the period .....	<u>(15,201)</u>
Balance at December 31, 2003 .....	\$ 11,436
Accruals for warranties issued during the period .....	16,923
Settlements made during the period .....	<u>(15,284)</u>
Balance at December 31, 2004 .....	<u><u>\$ 13,075</u></u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

**B. ACCOUNTING POLICIES—(Continued)**

When Teradyne receives revenue for extended warranties beyond one year it is deferred and recognized on a straight-line basis over the contract period. Related costs are expensed as incurred. The balance below is included in other accrued liabilities.

	Balance (in thousands)
Balance at December 31, 2002 .....	\$ 2,134
Deferral of new extended warranty revenue .....	1,223
Recognition of extended warranty deferred revenue .....	(1,707)
Balance at December 31, 2003 .....	\$ 1,650
Deferral of new extended warranty revenue .....	3,793
Recognition of extended warranty deferred revenue .....	(1,353)
Balance at December 31, 2004 .....	<u>\$ 4,090</u>

**Employee Stock Option Plans and Employee Stock Purchase Plan**

Teradyne accounts for its director and employee stock option and employee stock purchase plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and related Interpretations. Teradyne's employee stock purchase plan is a non-compensatory plan. Teradyne's stock option plans are accounted for using the intrinsic value method under the provisions of APB 25. Accordingly, there has been no expense for employee or director stock options or employee stock purchase plans. Proceeds from the exercise of stock options and the issuance of the employee stock purchase plan under Teradyne's stock plans are credited to common stock at par value and the excess is credited to additional paid-in capital.

Teradyne makes pro forma footnote disclosures as though the fair value method was followed under Statement of Financial Accounting Standard ("SFAS") No. 123, "Accounting For Stock-Based Compensation" ("SFAS 123"), as amended by SFAS No. 148, "Accounting for Stock Based Compensation—Transition and Disclosure." Had compensation for Teradyne's stock based compensation plans been accounted for at fair value the amounts reported in the Statement of Operations for the years 2004, 2003 and 2002 would have been:

	2004	2003	2002
	(in millions, except per share amounts)		
Net income (loss) as reported .....	\$165.2	\$(194.0)	\$(718.5)
Deduct: Total stock-based employee compensation expense determined under fair value method (no tax effects included) .....	(91.8)	(85.1)	(110.3)
Pro forma net income (loss) .....	\$ 73.4	\$(279.1)	\$(828.8)
Net income (loss) per common share—basic as reported .....	\$ 0.85	\$ (1.03)	\$ (3.93)
Net income (loss) per common share—diluted as reported .....	\$ 0.84	\$ (1.03)	\$ (3.93)
Net income (loss) per common share—basic pro forma .....	\$ 0.38	\$ (1.49)	\$ (4.53)
Net income (loss) per common share—diluted pro forma .....	\$ 0.37	\$ (1.49)	\$ (4.53)

The weighted average grant fair value for options granted during 2004, 2003 and 2002 was \$14.30, \$6.47 and \$9.58 per option, respectively. The fair value of options at date of grant was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions:

	2004	2003	2002
Expected life (years) .....	4.5	4.4	4.3
Interest rate .....	3.1%	2.5%	3.4%
Volatility .....	65.5%	68.2%	67.1%
Dividend yield .....	0.0%	0.0%	0.0%

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**B. ACCOUNTING POLICIES—(Continued)**

The weighted-average fair value of employee stock purchase rights granted in 2004, 2003 and 2002 was \$5.52, \$6.07 and \$5.29, respectively. The fair value of the employees' purchase rights was estimated using the Black-Scholes option-pricing model with the following assumptions for 2004, 2003 and 2002, respectively:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Expected life (years) .....	1.0	1.0	1.0
Interest rate .....	1.3%	1.3%	1.3%
Volatility .....	43.0%	48.0%	63.9%
Dividend yield .....	0.0%	0.0%	0.0%

**Investments in Other Companies**

Teradyne holds minority interests in public and private companies having operations or technology in areas within its strategic focus. These investments are included in other long-term assets and include investments accounted for at cost and under the equity method of accounting. Under the equity method of accounting, which generally applies to investments that represent a 20 to 50 percent ownership of the equity securities of the investees, Teradyne's proportionate share of the earnings or losses of the investees is included in other income and expense. Teradyne records an impairment charge when it believes an investment has experienced a decline in value that is other-than-temporary. At December 31, 2004 and 2003, these investments were zero and \$4.6 million, respectively.

**Income Taxes**

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The measurement of deferred tax assets is reduced by a valuation allowance if, based upon weighted available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. U.S. income taxes are not provided for on the earnings of non-U.S. subsidiaries which are expected to be reinvested indefinitely in operations outside the U.S.

**Translation of Non-U.S. Currencies**

Assets and liabilities of non-U.S. subsidiaries except for Diagnostic Solutions, which are denominated in currencies other than the U.S. dollar, are remeasured into U.S. dollars at rates of exchange in effect at the end of the fiscal year except nonmonetary assets and liabilities which are remeasured using historical exchange rates. The functional currency for non-U.S. subsidiaries is the U.S. dollar except for Diagnostic Solutions. Diagnostic Solutions local currency is its functional currency. Revenue and expense amounts are remeasured using an average of exchange rates in effect during the year, except those amounts related to nonmonetary assets and liabilities, which are remeasured at historical exchange rates. Net realized gains and losses resulting from currency remeasurement are included in operations and were immaterial for years ended December 31, 2004, 2003 and 2002.

**Net Income (Loss) per Common Share**

Basic net income (loss) per common share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per common share is

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

**B. ACCOUNTING POLICIES—(Continued)**

calculated by dividing net income (loss) by the sum of the weighted average number of common shares plus common stock equivalents, if applicable.

**Accounts Receivable and Allowance for Doubtful Accounts**

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The volatility of the industries that Teradyne serves can cause certain of its customers to experience shortages of cash flows, which can impact their ability to make required payments. Teradyne maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. Estimated allowances for doubtful accounts are reviewed periodically taking into account the customer's current payment history, the customer's current financial statements and other information regarding the customer's credit worthiness. If the financial condition of Teradyne's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Account balances are charged off against the allowance when it is probable the receivable will not be recovered.

**Comprehensive Income (Loss)**

Comprehensive income (loss) includes net income (loss), minimum pension liability adjustments, unrealized gains and losses on certain investments in debt, equity and derivative securities and cumulative translation adjustments.

**C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

In March 2004, the Financial Accounting Standards Board ("FASB") ratified Emerging Issues Task Force ("EITF") Issue No. 03-1, "The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments" ("EITF 03-1"), but, in September 2004, delayed the recognition and measurement provisions of EITF 03-1. For reporting periods beginning after June 15, 2004, only the disclosure requirements for available-for-sale securities and cost method investments are required.

In December 2004, the FASB issued SFAS No. 123R (revised 2004), "Share-Based Payment" ("SFAS 123R"). In interim or annual periods beginning after June 15, 2005, SFAS 123R would eliminate the ability to account for equity-based compensation using the intrinsic value-based method under APB 25. SFAS 123R requires companies' to calculate equity-based compensation expense for stock compensation awards based on the fair value of the equity instrument at the time of grant.

Under SFAS 123R, public companies are allowed to select from three alternative transition methods: the Modified Prospective Application, which allows for the adoption of SFAS 123R without restatement of prior interim periods in the year of adoption; the Modified Prospective Application with restatement of prior interim periods in the year of adoption; and the Modified Retrospective Application which allows companies to restate prior financial statements. Teradyne expects to adopt SFAS 123R beginning in the third quarter of 2005, as required, using the Modified Prospective method, and will not restate prior periods for the adoption of SFAS 123R.

Currently, Teradyne discloses pro forma net income (loss) and related pro forma net income (loss) per share in accordance with SFAS 123 and SFAS 148. Under SFAS 123R, equity-based compensation expense is required to be recognized in companies' financial statements. For the years ended December 31, 2004, 2003 and 2002, had SFAS 123R been effective, Teradyne would have recognized additional non-cash equity-based compensation expense of \$91.8 million, \$85.1 million, and \$110.3 million, respectively, applying the provisions of SFAS 123R. Teradyne is considering accelerating the vesting of certain outstanding, unvested "out of the money" stock options awarded to employees, officers and other eligible participants under Teradyne's various stock option plans. In addition, Teradyne is considering the use of other equity compensation vehicles including the use of restricted stock.

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS—(Continued)**

In November 2004, the FASB issued Statement of Financial Accounting Standards No. 151, "Inventory Costs, an amendment of ARB No. 43, Chapter 4" ("SFAS 151"). SFAS 151 modifies the accounting for abnormal inventory costs, and the manner in which companies allocate fixed overhead expenses to inventory. SFAS 151 is effective for inventory costs incurred during annual periods beginning after June 15, 2005. Teradyne does not expect SFAS 151 to have a material impact on its financial position and results of operations.

**D. RISKS AND UNCERTAINTIES**

Teradyne's future results of operations involve a number of risks and uncertainties. These factors include, but are not limited to, the slowdown in economies worldwide, current geopolitical turmoil, the continuing threat of domestic and international terrorist attacks, the current and anticipated market for electronics, risks associated with any measures Teradyne has taken to address the past slowdown in the market, Teradyne's ability to address a rapid increase in customer demand, failure to adequately protect Teradyne's intellectual property rights, failure to develop new technologies and customers' failure to accept new products, risks associated with acquisitions and divestitures, material litigation, competition, including new product introductions from Teradyne's competitors and competitive pricing pressures, risks of operating internationally, risks associated with an inability to attract and retain key employees, risks associated with Teradyne's suppliers' failure to meet Teradyne's product or delivery requirements, risks associated with, among other things, obligations and potential liabilities under environmental laws and regulations, Teradyne's debt service obligations with respect to its issuance in 2001 of convertible senior notes, provisions of Teradyne's charter and by-laws and Massachusetts law that make a takeover of Teradyne more difficult, changes in product revenue mix, the ability of Teradyne's suppliers and subcontractors to meet product and delivery requirements, the timing and level of customer orders received which can be shipped in a quarter and the timing of investments in engineering and development.

**E. ACQUISITIONS AND DIVESTITURES**

On August 9, 2002, Teradyne acquired certain assets of Precision Concepts Inc. ("PCI"), of Winston-Salem, North Carolina through a bankruptcy court sanctioned sale of assets. PCI was a sole source supplier of certain components to Connection Systems. The acquisition is part of the Connection Systems operating segment. The cost of the acquired manufacturing assets and inventory was \$8.4 million in cash. There was no ongoing customer revenue stream that was acquired. The operations are used to satisfy internal demand in the Connection Systems segment. Based on the purchase price allocation, the following table summarizes the fair values of the assets acquired on August 9, 2002:

	<u>(in thousands)</u>
Consideration:	
Cash paid .....	\$8,392
Total consideration .....	<u>\$8,392</u>
Assets acquired:	
Inventories .....	\$ 838
Property, plant, & equipment .....	<u>7,554</u>
Total assets acquired .....	<u>\$8,392</u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS

Cash Equivalents

Teradyne considers all highly liquid investments with original maturities of three months or less at the date of acquisition to be cash equivalents.

Marketable Securities

Teradyne classifies investments in marketable securities as trading, available-for-sale or held-to-maturity at the time of purchase and periodically re-evaluates such classification. There were no securities classified as trading at December 31, 2004 or 2003. Securities are classified as held-to-maturity when Teradyne has the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at cost with corresponding premiums or discounts amortized over the life of the investment to interest income. Securities classified as available-for-sale are reported at fair value. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in interest income. For the years ended December 31, 2004, 2003, and 2002, Teradyne recorded realized gains of \$0.7 million, \$3.2 million, and \$1.1 million, respectively, on the sale of its investments. For the years ended December 31, 2004, 2003, and 2002, Teradyne recorded realized losses of \$0.1 million, \$0.1 million, and \$0.5 million, respectively, on the sale of its investments. Unrealized gains and losses are included in accumulated other comprehensive income (loss). The cost of securities sold is based on the specific identification method.

Short-term marketable securities mature in less than one year. Long-term marketable securities have maturities of one to five years. At December 31, 2004 and 2003 these investments are reported as follows:

	Available-for-Sale			Fair Market Value
	Cost	Unrealized Gain	Unrealized (Loss)	
(in thousands)				
<b>2004</b>				
Short-term marketable securities:				
U.S. Treasury and government agency securities	\$ 22,218	\$ 16	\$ (95)	\$ 22,139
Corporate debt securities	53,369	140	(217)	53,292
	<u>\$ 75,587</u>	<u>\$ 156</u>	<u>\$ (312)</u>	<u>\$ 75,431</u>
Long-term marketable securities:				
U.S. Treasury and government agency securities	\$152,200	\$ 401	(1,094)	\$151,507
Corporate debt securities	256,112	986	(1,990)	255,108
	<u>\$408,312</u>	<u>\$1,387</u>	<u>\$(3,084)</u>	<u>\$406,615</u>
	Available-for-Sale			Fair Market Value
	Cost	Unrealized Gain	Unrealized (Loss)	
(in thousands)				
<b>2003</b>				
Short-term marketable securities:				
U.S. Treasury and government agency securities	\$ 23,770	\$ 178	\$ (2)	\$ 23,946
Corporate debt securities	36,527	504	(3)	37,028
	<u>\$ 60,297</u>	<u>\$ 682</u>	<u>\$ (5)</u>	<u>\$ 60,974</u>
Long-term marketable securities:				
U.S. Treasury and government agency securities	\$153,225	\$1,392	\$ (370)	\$154,247
Corporate debt securities	139,464	3,465	(558)	142,371
	<u>\$292,689</u>	<u>\$4,857</u>	<u>\$ (928)</u>	<u>\$296,618</u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

Other

As of December 31, 2004, the estimated fair value of Teradyne's convertible notes was approximately \$395.3 million compared to the carrying value of \$391.5 million. As of December 31, 2003, the estimated fair value of Teradyne's convertible notes was approximately \$462.0 million compared to the carrying value of \$400.0 million. The estimated fair value of the convertible notes is based on the quoted market prices of the convertible notes on December 31, 2004 and 2003.

Fair values for Teradyne's non-convertible debt were determined based on interest rates that are currently available to Teradyne for the issuance of debt with similar terms and remaining maturities for debt issues and approximate carrying values.

For all other balance sheet financial instruments, the carrying amount approximates fair value.

Derivatives

Teradyne adopted SFAS 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS 137, SFAS 138, and SFAS 149. SFAS 133 requires Teradyne to recognize all derivatives on the balance sheet at fair value. Adoption of SFAS 133 did not have a material impact on Teradyne's financial position and results of operations.

Teradyne conducts business in a number of foreign countries, with certain transactions denominated in local currencies. The purpose of Teradyne's foreign currency management is to minimize the effect of exchange rate fluctuations on certain foreign denominated net monetary assets and anticipated cash flows. The terms of currency instruments used for hedging purposes are consistent with the timing of the transactions being hedged. Teradyne does not use derivative financial instruments for trading or speculative purposes.

To minimize the effect of exchange rate fluctuations associated with the remeasurement of net monetary assets denominated in foreign currencies, Teradyne enters into foreign currency forward contracts. The change in fair value of these derivatives is recorded directly in earnings, and is used to offset the change in fair value of the net monetary assets denominated in foreign currencies.

To minimize the effect of exchange rate fluctuations associated with the future cash flows of revenue contracts denominated in a foreign currency, Teradyne enters into foreign currency forward contracts. These foreign currency forward contracts are designated as cash flow hedges and are carried on the Teradyne's balance sheet at fair value with the effective portion of the contracts' gains or losses included in accumulated other comprehensive income (loss) and subsequently recognized in earnings in the same period the hedged transaction occurs. These forward contracts generally expire within 24 months.

At December 31, 2004 and 2003, Teradyne had the following forward currency contracts to buy and sell non-U.S. currencies for U.S. dollars with the following notional amounts:

	December 31, 2004			December 31, 2003		
	Buy Position	Sell Position	Net Total	Buy Position	Sell Position	Net Total
	(in millions)					
Japanese Yen .....	\$ —	\$16.5	\$16.5	\$ (0.5)	\$ 8.9	\$ 8.4
British Pound Sterling .....	(11.7)	11.0	(0.7)	(8.8)	11.6	2.8
European Euro .....	(1.2)	17.2	16.0	(9.7)	4.4	(5.3)
Total .....	<u>\$ (12.9)</u>	<u>\$44.7</u>	<u>\$31.8</u>	<u>\$ (19.0)</u>	<u>\$24.9</u>	<u>\$ 5.9</u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

The fair value of the outstanding contracts at December 31, 2004 and 2003 was not material. Teradyne recorded net realized losses related to foreign currency forward contracts hedging net monetary positions in 2004 of \$1.9 million. For 2003 and 2002, Teradyne recorded net realized gains related to forward contracts hedging net monetary positions of \$1.7 million and \$0.9 million, respectively. Both the contract gains and losses on the items being hedged are included in selling and administrative expenses.

During fiscal 2002 and 2003, there were no cash flow designated hedges. During 2004, \$0.1 million of losses on cash flow hedges due to ineffectiveness was included in selling and administrative expense.

Derivative gains and losses included in accumulated other comprehensive loss are reclassified into earnings when the forecasted transaction occurs. During fiscal 2004, \$0.4 million of losses were reclassified to revenue.

Of the net derivative losses included in accumulated other comprehensive loss as of December 31, 2004, \$0.3 million will be reclassified into earnings within the next twelve months. No cash flow hedges were derecognized or discontinued during fiscal 2004.

At December 31, 2003 and 2002, Teradyne held warrants to purchase 0.3 million shares of common stock of LogicVision, Inc., a public technology company, at an exercise price of \$4.86 per share. During 2004, the warrants expired. In accordance with SFAS 133, Teradyne recorded a loss of \$0.4 million, a gain of \$0.1 million and a loss of \$2.1 million in other income and expense for the changes in fair value of the warrants for the years ended December 31, 2004, 2003 and 2002 respectively.

**Concentration of Credit Risk**

Financial instruments which potentially subject Teradyne to concentrations of credit risk consist principally of marketable securities, forward currency contracts and accounts receivable. Teradyne maintains cash investments primarily in U.S. Treasury and government agency securities and corporate debt securities, rated AA or higher, which have minimal credit risk. Teradyne places forward currency contracts with high credit-quality financial institutions in order to minimize credit risk exposure. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of geographically dispersed customers. Teradyne performs ongoing credit evaluations of its customers' financial condition but does not require collateral to secure accounts receivable.

G. DEBT

Long-term debt at December 31, 2004 and 2003 consisted of the following:

	2004	2003
	(in thousands)	
Convertible senior notes .....	\$391,500	\$400,000
Mortgage notes payable .....	5,040	5,040
Other long-term debt .....	2,713	2,928
Total .....	399,253	407,968
Less current maturities .....	321	310
	<u>\$398,932</u>	<u>\$407,658</u>

The total maturities of long-term debt for the succeeding five years and thereafter are: 2005—\$0.3 million; 2006—\$391.8 million; 2007—\$0.3 million; 2008—\$0.3 million; 2009—\$0.3 million and \$6.3 million thereafter.

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**G. DEBT—(Continued)**

**Convertible Senior Notes**

In 2001, Teradyne issued \$400 million principal amount of 3.75% Convertible Senior Notes due 2006 (the "Notes") in a private placement and received net proceeds of \$389 million. The Notes are convertible at the option of the holders at a rate which is equivalent to a conversion price of approximately \$26.00 per share, which is equal to a conversion rate of approximately 38.4615 shares of common stock per \$1,000 principal amount of Notes. On or after October 18, 2004, Teradyne may redeem the Notes in whole or in part at the prices set forth below. The redemption price, expressed as a percentage of principal amount, is as follows for the designated periods:

<u>Period</u>	<u>Redemption Price</u>
Beginning on October 18, 2004 and ending on October 14, 2005 .....	101.50%
Beginning on October 15, 2005 and ending on October 14, 2006 .....	100.75%

and thereafter equal to 100% of the principal amount.

Teradyne began making annual interest payments of up to \$15 million, paid semi-annually, on the Notes on April 15, 2002. The Notes are senior unsecured obligations of Teradyne that rank equally with Teradyne's existing and future unsecured and unsubordinated indebtedness. If a "change in control" occurs, the holders of the Notes have the right to require Teradyne to repurchase all of the Notes not previously called for redemption. The price Teradyne is required to pay is 100% of the principal amount of the Notes to be repurchased, together with interest accrued but unpaid to, but excluding, the repurchase date. At Teradyne's option and subject to the satisfaction of certain conditions, instead of paying the repurchase price in cash, it may pay the repurchase price in common stock valued at 95% of the average of the closing prices of common stock for the five trading days immediately preceding and including the third trading day prior to the repurchase date. During 2004, Teradyne repurchased \$8.5 million of the outstanding principal amount of the Notes pursuant to the Board of Directors authorization given to management to repurchase up to \$100 million of the outstanding Notes in open market purchases at negotiated prices below 101.50. Teradyne incurred no gain or loss during the year ended December 31, 2004 as a result of this transaction. As of December 31, 2004, \$391.5 million of the Notes remain outstanding.

**Mortgage Notes Payable**

On December 19, 2001, Teradyne obtained a loan of approximately \$45 million in the form of a 7.5% mortgage loan maturing on January 1, 2007. This loan was collateralized by certain Teradyne California real estate properties. Teradyne prepaid this mortgage in the third quarter of 2003. Prior to the prepayment, principal payments were made according to a twenty-year amortization schedule through December 2006, with the remaining principal due on January 1, 2007.

In 1983, Teradyne obtained a loan of \$4.5 million from the Boston Redevelopment Authority in the form of a 3% mortgage loan maturing March 31, 2013. This loan is collateralized by Teradyne's property in Boston, Massachusetts, which may, at Teradyne's option, become subordinated to another mortgage up to a maximum of \$5.0 million. Interest for the first 4½ years of the loan was capitalized up to a principal amount of \$5.0 million. Since September 30, 1987, Teradyne has been making semi-annual interest payments. The outstanding principal balance of this mortgage was \$5.0 million as of December 31, 2004.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

G. DEBT—(Continued)

Notes Payable- Banks

The weighted average interest rates on notes payable outstanding in Japan as of December 31, 2004 and 2003 was 1.4% and 1.2%, respectively. The outstanding notes payable balance as of December 31, 2004 and 2003 was \$4.8 million and \$7.3 million, respectively.

H. ACCUMULATED OTHER COMPREHENSIVE LOSS

At December 31, 2004 and 2003, the accumulated other comprehensive loss balances were:

	2004	2003
	(in thousands)	
Minimum pension liability	\$(60,548)	\$(58,286)
Unrealized (loss)/gain on investments	(1,871)	5,872
Foreign currency translation adjustments	1,381	568
Unrealized loss on cash flow hedge	(275)	—
Total accumulated other comprehensive loss	<u>\$(61,313)</u>	<u>\$(51,846)</u>

I. GOODWILL AND INTANGIBLE ASSETS

Intangible Assets

Amortizable intangible assets consist of the following:

	December 31, 2004			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
	(in thousands)			
Completed technology	\$19,193	\$ 8,145	\$11,048	7.5 years
Service and software maintenance contracts and customer relationships	8,342	5,440	2,902	5.7 years
Tradenames and trademarks	3,800	1,504	2,296	8.0 years
Total intangible assets	<u>\$31,335</u>	<u>\$15,089</u>	<u>\$16,246</u>	7.1 years

	December 31, 2003			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
	(in thousands)			
Completed technology	\$19,193	\$ 5,577	\$13,616	7.5 years
Service and software maintenance contracts and customer relationships	8,342	4,840	3,502	5.7 years
Tradenames and trademarks	3,800	1,029	2,771	8.0 years
Total intangible assets	<u>\$31,335</u>	<u>\$11,446</u>	<u>\$19,889</u>	7.1 years

During 2003, Assembly Test Systems sold its manufacturing software product line and manual x-ray inspection and rework product line for total cash proceeds of \$2.1 million. These transactions resulted in a loss of \$6.2 million which has been recorded in restructuring and other charges. Included in the \$6.2 million loss is an intangible asset impairment charge of \$3.7 million. Also during 2003, Assembly Test Systems recorded an

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

I. GOODWILL AND INTANGIBLE ASSETS—(Continued)

intangible asset impairment charge of \$2.6 million as a result of the discontinuance of manufacturing, distributing and primary support of one of the automated x-ray inspection (“AXI”) products. Both charges were recorded in Restructuring and Other Charges in the consolidated Statement of Operations.

During 2002, Teradyne recorded an intangible asset impairment charge of \$7.3 million related to the divestiture of two product lines in its Assembly Test Systems segment. The charge was recorded in Restructuring and Other Charges in the consolidated Statement of Operations.

Aggregate amortization expense for the years ended December 31, 2004, 2003 and 2002 was \$3.6 million, \$4.4 million and \$7.3 million, respectively. Estimated amortization expense for each of the five succeeding fiscal years is as follows:

<u>Year</u>	<u>Amount</u> (in thousands)
2005 .....	\$3,643
2006 .....	3,643
2007 .....	3,529
2008 .....	2,962
2009 .....	2,469

**Goodwill**

Teradyne has identified two reporting units with goodwill, Connection Systems and Assembly Test Systems, which are also reportable segments. The changes in the carrying amounts of goodwill during the years ended December 31, 2004 and 2003 are as follows:

	<u>Connection Systems</u>	<u>Assembly Test Systems</u>	<u>Total</u>
	(in thousands)		
Balance at December 31, 2003 .....	\$49,056	\$69,147	\$118,203
Balance at December 31, 2004 .....	\$47,029	\$69,147	\$116,176

During 2004, goodwill was reduced by \$2.0 million in the Connection Systems segment as a result of the return of escrowed shares related to the Herco Technology, Corp. and Perception Laminates, Inc. acquisitions.

SFAS 142 required Teradyne to complete a transitional goodwill impairment test within six months from the date of adoption. Following the adoption of SFAS 142, Teradyne completed an initial impairment test, during the first quarter of 2002, based on the comparison of the fair value of the reporting units with their respective carrying value as of January 1, 2002. Teradyne concluded that there was no impairment in either the Assembly Test Systems segment or the Connection Systems segment as of adoption. As of January 1, 2002, Teradyne ceased the amortization of goodwill. SFAS 142 provides that goodwill of a reporting unit be tested for impairment on an annual basis and between annual tests in certain circumstances including a significant adverse change in the business outlook. Teradyne’s annual impairment test is performed in the fourth quarter of each fiscal year. Teradyne tested both the Assembly Test Systems and Connection Systems reporting units for impairment during its annual test and concluded that there was no impairment of goodwill in either reporting unit as of December 31, 2004, 2003 and 2002.

During the quarter ended September 29, 2002, as a result of contraction in the Assembly Test Systems market to its lowest level in a decade as evidenced by various market reports available to Teradyne, Teradyne

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**I. GOODWILL AND INTANGIBLE ASSETS—(Continued)**

decreased its forecasted revenue, bookings and profit for fiscal years 2003 through 2005 from the previous quarter's forecast for the Assembly Test Systems segment and reduced its workforce by 94 employees to appropriately size the segment given the revised business outlook. As a result, Teradyne performed an interim impairment test for the goodwill related to the Assembly Test Systems segment as of September 29, 2002. Teradyne concluded that the carrying value of the assets and liabilities associated with the Assembly Test Systems segment exceeded its fair value and recognized a \$78.5 million goodwill impairment charge recorded in Goodwill impairment in the consolidated Statements of Operations. The impairment charge was measured by comparing the implied fair value of the goodwill associated with the Assembly Test Systems segment to its carrying value. The fair value of the segment was estimated using the expected present value of future cash flows.

**J. COMMITMENTS AND CONTINGENCIES**

**Lease Commitments**

Rental expense for the years ended December 31, 2004, 2003 and 2002 was \$24.3 million, \$26.4 million and \$32.4 million, respectively.

The following table reflects Teradyne's non-cancelable operating lease commitments:

	<b>Non-cancelable Lease Commitments* (in thousands)</b>
2005 .....	\$27,681
2006 .....	16,862
2007 .....	14,235
2008 .....	6,527
2009 .....	5,759
Beyond 2009 .....	12,817
Total .....	<u>\$83,881</u>

\* Minimum payments have not been reduced by minimum sublease income of \$9.6 million due in the future under non-cancelable subleases.

**Legal Claims**

After the August 2000 acquisition of Herco Technology Corp. and Perception Laminates, Inc. the former owners of those companies filed a complaint on September 5, 2001 against Teradyne and two of its executive officers. The case is now pending in Federal District Court in San Diego, California. Teradyne filed a motion to dismiss the complaint in its entirety on behalf of Teradyne and the two individual defendants. The court granted the motion in part, and the only remaining claims were that the sale of Teradyne's common stock to the former owners violated certain California securities statutes and common law and that Teradyne had breached certain contractual obligations in the agreements relating to the acquisitions. Teradyne's subsequent motion for partial summary judgment with respect to the breach of contract claims was granted on November 7, 2002. On December 9, 2002, the plaintiffs filed a motion asking the court to reconsider its summary judgment ruling or, alternatively, for certification under Rule 54(b) which would grant the plaintiffs leave to appeal both the Court's

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

J. COMMITMENTS AND CONTINGENCIES—(Continued)

ruling regarding dismissal of claims and its ruling granting summary judgment to the Ninth Circuit Court of Appeals. Teradyne opposed these motions. On April 22, 2003, the Court denied the plaintiffs' motion from reconsideration and the plaintiffs' request for certification under Rule 54(b). The only claim remaining before the District Court from the original complaint related to an allegation of fraud in connection with the setting of the transaction price. Teradyne has answered and denied all liability. On December 27, 2004, the plaintiffs voluntarily stipulated to the dismissal with prejudice of its remaining claims in the trial court, without having received any payment or other consideration from Teradyne. On February 2, 2005, the plaintiffs filed a notice of appeal from the court's prior orders dismissing certain of the plaintiffs' claims, granting partial summary judgment against them and denying the plaintiffs' motion for reconsideration.

In 2001, Teradyne was designated as a "potentially responsible party" ("PRP") at a clean-up site in Los Angeles, California. This claim arises out of Teradyne's acquisition of Perception Laminates, Inc. in August 2000. Prior to that date, Perception Laminates had itself acquired certain assets of Alco Industries Inc. under an asset purchase agreement dated July 30, 1992. Neither Teradyne nor Perception Laminates have ever conducted any operations at the Los Angeles site. Teradyne has asked the State of California to drop the PRP designation, but California has not yet agreed to do so.

In August of 2003, Hampshire Equity Partners II, LP ("HEP") informed Teradyne of a potential claim that was subsequently contained in the complaint that HEP filed on April 30, 2004 against Teradyne and Teradyne's Connection Systems segment ("TCS") in the United States District Court of the Southern District of New York, relating to its February 21, 2001 investment of \$55 million in Connector Service Corporation aka AMAX Plating, Inc. ("CSC"), which was a supplier to TCS at the time. During the due diligence that HEP conducted prior to making that investment, an agent of HEP spoke with TCS, among other CSC customers, concerning CSC. On or about September 24, 2003, CSC filed for bankruptcy protection as discussed above. HEP has now brought suit against Teradyne and TCS asserting fraud and negligence based claims, and a claim for intentional interference with economic opportunity, relating to statements that a TCS representative made to HEP's agent prior to HEP's February 2001 investment in CSC. HEP seeks to hold Teradyne and TCS responsible for its decision to invest in CSC and for the losses that it suffered upon the bankruptcy of CSC. HEP is now seeking damages for an unstated amount of not less than \$55 million. On June 17, 2004, Teradyne and TCS filed a motion to dismiss HEP's complaint in its entirety. On August 9, 2004, HEP filed its opposition to the motion to dismiss and Teradyne filed its reply brief on September 22, 2004. Teradyne's motion to dismiss remains pending.

Teradyne believes that it has meritorious defenses against the above unsettled claims and intends to vigorously contest them. While it is not possible to predict or determine the outcomes of the unsettled claims or to provide possible ranges of losses that may arise, Teradyne believes the losses associated with all of these actions will not have a material adverse effect on its consolidated financial position or liquidity, but could possibly be material to its consolidated results of operations of any one period.

In addition, Teradyne is subject to legal proceedings, claims and investigations that arise in the ordinary course of business such as, but not limited to, patent, employment, commercial and environmental matters. Although there can be no assurance, there are no such matters pending that Teradyne expects to be material with respect to its business, financial position or results of operations.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

J. COMMITMENTS AND CONTINGENCIES—(Continued)

**Guarantees and Indemnification Obligations**

Teradyne provides an indemnification, to the extent permitted by law, to its officers, directors, employees and agents for liabilities arising from certain events or occurrences while the officer, director, employee, or agent, is or was serving, at Teradyne's request in such capacity. With respect to acquisitions, Teradyne provides indemnifications to or assumes indemnification obligations for the current and former directors, officers and employees of the acquired companies in accordance with the acquired companies' bylaws and charter. As a matter of practice, Teradyne has maintained directors and officer liability insurance coverage including coverage for directors and officers of acquired companies. Two Teradyne Executive Officers are named defendants in a securities case pending in the Federal District Court in San Diego, CA. Each of these Executive Officers has invoked the indemnification provisions described herein and insurance claims have been submitted to and are being processed by Teradyne's director and officer liability insurance provider.

Teradyne enters into agreements in the ordinary course of business with customers, resellers, distributors, integrators and suppliers. Most of these agreements require Teradyne to defend and/or indemnify the other party against intellectual property infringement claims brought by a third party with respect to Teradyne's products. From time to time, Teradyne also indemnifies customers and business partners for damages, losses and liabilities they may suffer or incur relating to personal injury, personal property damage, product liability and environmental claims relating to the use of Teradyne's products and services or resulting from the acts or omissions of Teradyne, its employees, authorized agents or subcontractors. On occasion, Teradyne has also provided guarantees to customers regarding the performance of its products in addition to the warranty described below.

As a matter of ordinary business course, Teradyne warrants that its products, including software products, will substantially perform in accordance with its standard published specifications in effect at the time of delivery. Most warranties have a one year duration commencing from installation. A provision is recorded upon revenue recognition to cost of revenue for estimated warranty expense upon historical experience. When Teradyne receives revenue for extended warranties beyond the standard duration, it is deferred and recognized on a straight line basis over the contract period. Related costs are expensed as incurred. As of December 31, 2004 and 2003, Teradyne had a product warranty accrual of \$13.1 million and \$11.4 million, respectively in other accrued liabilities and revenue deferrals related to extended warranties of \$4.1 million and \$1.7 million, respectively in deferred revenue.

In addition, and in the ordinary course of business, Teradyne provides minimum purchase guarantees to certain of its vendors to ensure continuity of supply against the market demand. Although some of these guarantees provide penalties for cancellations and/or modifications to the purchase commitments as the market demand decreases, most of the guarantees do not. Therefore, as the market demand decreases, Teradyne re-evaluates these guarantees and determines what charges, if any, should be recorded.

With respect to its agreements covering product, business or entity divestitures and acquisitions, Teradyne provides certain representations, warranties and covenants to divestiture purchasers and agrees to indemnify and hold such purchasers harmless against breaches of such representations, warranties and covenants. Many of the indemnification claims have a definite expiration date while some remain in force indefinitely. With respect to its acquisitions, Teradyne may, from time to time, assume the liability for certain events or occurrences that took place prior to the date of acquisition.

As a matter of ordinary business course, Teradyne occasionally guarantees certain indebtedness obligations of its subsidiary companies, limited to the borrowings from financial institutions and purchase commitments to certain vendors.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

J. COMMITMENTS AND CONTINGENCIES—(Continued)

Based on historical experience and information known as of December 31, 2004, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations as of December 31, 2004 because the amount would be immaterial.

K. NET INCOME (LOSS) PER COMMON SHARE

The following table sets forth the computation of basic and diluted net loss per common share:

	2004	2003	2002
	(in thousands, except per share amounts)		
Net income (loss) .....	\$165,237	\$(193,993)	\$(718,469)
Shares used in income (loss) per common share—basic .....	194,048	187,845	182,861
Employee and director stock options .....	3,273	—	—
Employee stock purchase rights .....	111	—	—
Dilutive potential common shares .....	3,384	—	—
Shares used in income (loss) per common share—diluted .....	197,432	187,845	182,861
Net income (loss) per common share—basic .....	\$ 0.85	\$ (1.03)	\$ (3.93)
Net income (loss) per common share—diluted .....	\$ 0.84	\$ (1.03)	\$ (3.93)

The computation of diluted net income for the year ended December 31, 2004 excludes the potential exercise of options to purchase approximately 21.8 million shares because the option price was greater than the average market price of the common shares, and the equivalent shares related to the Notes outstanding, as the effect of both would have been anti-dilutive. All options and equivalent shares related to the Notes outstanding in 2003 and 2002 were excluded from the calculation of diluted net loss per share because the effect would have been antidilutive. As of December 31, 2003 and 2002, there were 29.9 million and 33.4 million options outstanding, respectively. As of December 31, 2004, 2003 and 2002, there were 15.1 million, 15.4 million, and 15.4 million equivalent shares related to the Notes outstanding, respectively.

L. RESTRUCTURING AND OTHER CHARGES

The tables below represent activity related to restructuring charges for the years ended December 31, 2004, 2003, and 2002. The accrual for severance and benefits is reflected in accrued employees' compensation and withholdings. The accrual for lease payments on vacated facilities is reflected in other accrued liabilities and other long-term accrued liabilities and is expected to be paid out over the lease terms, the latest of which expires in 2012. Teradyne expects to pay out approximately \$7.0 million against the lease accruals over the next twelve months. Teradyne's future lease commitments are net of expected sublease income of \$13 million as of December 31, 2004. Teradyne has subleased approximately 52% of its unoccupied space as of December 31, 2004 and is actively attempting to sublease the remaining space.

The table below summarizes the liability and activity for the year ended December 31, 2004 relating to restructuring and other charges (in thousands):

	Long-Lived Asset Impairment	Severance and Benefits	Facility Related	Other Charges	Total
Balance at December 31, 2003 .....	\$ —	\$ 7,766	\$ 29,222	\$ 1,273	\$ 38,261
2004 provision (reversal) .....	810	2,864	3,188	(1,503)	5,359
Cash payments .....	—	(7,570)	(11,182)	1,259	(17,493)
Asset write-downs .....	(810)	—	—	—	(810)
Balance at December 31, 2004 .....	\$ —	\$ 3,060	\$ 21,228	\$ 1,029	\$ 25,317

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**L. RESTRUCTURING AND OTHER CHARGES—(Continued)**

During the year ended December 31, 2004, Teradyne recorded the following activity related to restructuring and other charges:

- \$1.4 million reversal due to revised estimates related to long-lived asset impairment charges that had previously been recorded where the impaired assets sold for more than their respective carrying amount, and \$2.2 million of charges for certain long-lived assets that were impaired as the estimated value of such assets was less than the carrying amount. The Assembly Test Systems segment recorded \$1.1 million of this charge and \$0.9 million was recorded in the Connection Systems segment. The remainder of the charge was recorded across other reportable segments.
- \$5.0 million charge taken for severance and related employee benefits. This charge is offset by a \$2.1 million reversal of estimates on future benefits for severed employees. There were approximately 184 employees terminated in the year ended December 31, 2004 across Teradyne.
- \$3.2 million charge revised estimates of losses due to changes in the assumed amount and timing of sublease income on facilities that have been exited prior to the end of the lease term. The Connection Systems, Assembly Test and Semiconductor Test segments recorded \$2.0 million, \$1.0 million and \$0.2 million, respectively.
- \$1.5 million net reversal of other charges consisting of \$1.4 million of amounts realized under agreements related to product lines that were sold, and \$0.1 million of revisions of estimates of liabilities incurred during restructuring activities, both of which occurred in prior reporting periods in the Assembly Test and Other Test Systems segments.

During 2004, Teradyne recorded a gain on the sale of a business of \$0.9 million. This amount related to an earn-out provision from a divestiture in the Connection Systems segment in 1999, and has been classified as gain on the sale of business in the statement of operations for the year ended December 31, 2004.

The table below summarizes the liability and activity for the year ended December 31, 2003 relating to restructuring and other charges:

	<b>Long-Lived Asset Impairment</b>	<b>Severance and Benefits</b>	<b>Loss on Sale of Product Lines</b>	<b>Facility Related</b>	<b>Other Charges</b>	<b>Total</b>
	(in thousands)					
Balance at December 31, 2002 .....	\$ —	\$ 8,242	\$ —	\$25,240	\$ —	\$ 33,482
2003 provision .....	29,403	21,367	6,891	12,350	1,273	71,284
Cash payments .....	—	(21,843)	—	(8,368)	—	(30,211)
Asset writedowns .....	(29,403)	—	(6,891)	—	—	(36,294)
Balance at December 31, 2003 .....	<u>\$ —</u>	<u>\$ 7,766</u>	<u>\$ —</u>	<u>\$29,222</u>	<u>\$1,273</u>	<u>\$ 38,261</u>

During the year ended December 31, 2003, Teradyne recorded the following activity related to restructuring and other charges:

- \$29.4 million charge, primarily for certain long-lived assets held for sale that were impaired as the estimated fair value was less than the carrying value of the assets, including \$11.2 million for the sale and leaseback of certain manufacturing assets, and \$7.8 million for a reduction in the fair value of properties held for sale in the Connection Systems segment. The charge for the Semiconductor Test Systems segment of \$3.5 million related primarily to a reduction in the fair value of properties held for sale, and \$6.9 million related to the impairment of intangible assets, and manufacturing assets held for

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

L. RESTRUCTURING AND OTHER CHARGES—(Continued)

sale in the Assembly Test Systems segment. All of the machinery and equipment and facilities have been sold or disposed of as of December 31, 2004.

- \$21.4 million charge for severance and related benefits. There were approximately 890 employees terminated in 2003 across Teradyne.
- \$8.1 million charge for the loss on sale of product lines, of which \$6.9 million has been recorded in restructuring and other charges and \$1.2 million has been recorded in cost of sales. The product lines sold were in the Assembly Test Systems segment and the Other Systems segment. In the first quarter of 2003, the Assembly Test Systems segment sold its manufacturing software product line and manual x-ray inspection and rework product line for total cash proceeds of \$2.1 million. These transactions resulted in a loss of \$6.7 million for the year ended December 31, 2003 of which \$6.2 million has been recorded in restructuring and other charges, and \$0.5 million has been recorded in cost of sales. In the year ended December 31, 2003, the Other Test Systems Segment recorded a charge of \$1.4 million to write down its net assets relating to the sale of the Autodiagnosis automotive after market product line of which \$0.7 million has been recorded in restructuring and other charges and \$0.7 million has been recorded in cost of sales.
- \$12.4 million charge consisting primarily of revised estimates of losses due to changes in the assumed amount and timing of sublease income on facilities that have been exited prior to the end of the lease term. The Connection Systems segment recorded \$3.2 million of this charge and \$8.7 million was recorded in the Assembly Test Systems segment. The remainder of the charge was recorded across other operating segments
- \$1.3 million charge primarily for contractual penalties associated with resizing the Connections Systems segment.

The table below summarizes activity for the year ended December 31, 2002 relating to restructuring and other charges:

	Long-Lived Asset Impairment	Facility Related	Severance and Benefits	Total
	(in thousands)			
Balance at December 31, 2001 .....	\$ —	\$ 1,676	8,471	\$ 10,147
2002 provision .....	76,994	25,751	22,495	125,240
Cash payments .....	—	(2,187)	(22,724)	(24,911)
Asset writedowns .....	(76,994)	—	—	(76,994)
Balance at December 31, 2002 .....	<u>\$ —</u>	<u>\$25,240</u>	<u>\$ 8,242</u>	<u>\$ 33,482</u>

During the year ended December 31, 2002, Teradyne recorded the following activity related to restructuring and other charges:

- \$77.0 million charge primarily for certain long-lived assets held for sale that were impaired as the estimated fair value was less than the carrying value of these assets. The charges included machinery and equipment, facilities held for sale and intangible assets. All of the machinery and equipment and facilities have been sold or disposed of as of December 31, 2004.
- \$25.8 million charge related to future lease commitments for vacated manufacturing and administrative space which have been exited prior to the end of the lease term.
- \$22.5 million charge for severance and related benefits. There were approximately 1,010 employees terminated across Teradyne during the year ended December 31, 2002.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. OTHER CHARGES

The table below reflects certain operating statement activity for the year ended December 31, 2004, 2003 and 2002:

	<u>Excess and Obsolete Inventory</u>	<u>Product Line Divestiture</u>	<u>Inventory Provision Recovery</u>	<u>Accelerated Depreciation</u>	<u>Total</u>
	(in thousands)				
2004 Activity:					
Cost of revenue .....	\$11,335	\$ —	\$(2,232)	\$ —	\$ 9,103
Selling and administrative .....	—	—	—	\$ 66	\$ 66
Total 2004 charges .....	<u>\$11,335</u>	<u>\$ —</u>	<u>\$(2,232)</u>	<u>\$ 66</u>	<u>\$ 9,169</u>
2003 Activity:					
Cost of revenue .....	\$16,569	\$1,158	\$(5,284)	\$ 4,711	\$17,154
Engineering and development .....	—	—	—	1,486	1,486
Selling and administrative .....	—	—	—	6,359	6,359
Total 2003 charges .....	<u>\$16,569</u>	<u>\$1,158</u>	<u>\$(5,284)</u>	<u>\$12,556</u>	<u>\$24,999</u>
2002 Activity:					
Cost of revenue .....	\$39,021	—	—	5,667	44,688
Engineering and development .....	—	—	—	838	838
Selling and administrative .....	—	—	—	1,144	\$ 1,144
Total 2002 charges .....	<u>\$39,021</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 7,649</u>	<u>\$46,670</u>

During the year ended December 31, 2004, an excess and obsolete provision of \$11.3 million was recorded in cost of revenue of which \$6.2 million related to Semiconductor Test Systems, \$3.0 million related to Assembly Test Systems and \$1.6 million related to Connection Systems.

During the year ended December 31, 2003, an excess and obsolete provision of \$16.6 million was recorded in cost of revenue of which \$9.3 million related to Assembly Test Systems and included \$3.6 million relating to the discontinuance of manufacturing, distributing and primary support of the AOI product line and \$5.2 million related to Semiconductor Test Systems System on a Chip parts and components.

During the year ended December 31, 2002, an excess and obsolete provision of \$39.0 million was recorded in cost of revenue of which \$20.7 million related to the lack of demand in the Semiconductor Test Systems segment for the Probe-One product and the discontinuance of the J996 product after a last time buy offer to Teradyne's customers.

During the year ended December 31, 2003, Teradyne recorded a product line divestiture charge of \$1.2 million which includes \$0.7 million in Other Test Systems relating to the sale of the Autodiagnos automotive after market product line and \$0.5 million at the Assembly Test Systems segment relating to the sale of the manufacturing software product line and manual x-ray inspection and rework product line.

During the year ended December 31, 2004, Teradyne recorded an inventory provision recovery of \$2.2 million of which \$1.0 million, \$0.9 million, and \$0.3 million related to inventory sold that was previously reserved for in the Semiconductor Test, Connection Systems segments, and Assembly Test Systems, respectively.

During the year ended December 31, 2003, Teradyne recorded an inventory provision recovery of \$5.3 million of which \$3.2 million was related to memory test inventory sold which had been reserved for in the fourth quarter of 2002 in the Semiconductor Test Systems segment.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. OTHER CHARGES—(Continued)

During the year ended December 31, 2003, Teradyne recorded a \$12.6 million charge for accelerated depreciation which relates to the incremental depreciation over the normal depreciation expense for long-lived assets, including leasehold improvements, as a result of the decision to consolidate data storage and locations and therefore shorten the service period of the assets. The charge includes \$5.6 million at the Assembly Test Systems segment related to the Westford, MA move to North Reading, MA; \$3.9 million at Corporate related to the consolidation of data storage equipment; \$1.8 million at the Connection Systems segment related to the Hudson, NH and Cavan, Ireland facilities; \$0.7 million at the Semiconductor Test Systems segment related to the Bedford, MA facility; and \$0.6 million at Corporate related to a Boston facility.

During the year ended December 31, 2002, Teradyne recorded a \$7.6 million charge for accelerated depreciation which relates to the incremental additional depreciation over the normal depreciation expense for long-lived assets as a result of the decision to consolidate locations and therefore shorten the service period. The charge includes \$4.5 million at the Connection Systems segment related to the Hudson, NH and Fremont, CA facilities; \$2.2 million at the Assembly Test segment related to the Westford, MA facility; \$0.6 million at the Semiconductor Test segment related to the Bedford, MA facility; and \$0.3 million at Corporate related to a Boston facility.

Other income and expense, net for the years ended December 31, 2004, 2003 and 2002 includes the following:

<u>Income/(expense)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
		(in thousands)	
Gain on sale of investment (1) .....	\$2,584	\$ 2,800	\$ —
Collection of loan (2) .....	585	—	7,144
Other than temporary impairment of common stock investment .....	(267)	—	(3,115)
Fair value adjustment on warrants .....	(366)	138	(2,051)
Mortgage prepayment penalty (3) .....	—	(3,220)	—
Other than temporary impairment of investment .....	—	(2,592)	—
Writedown of investment in an engineering service provider .....	—	—	(2,288)
Total .....	<u>\$2,536</u>	<u>\$(2,874)</u>	<u>\$ (310)</u>

- (1) Gain on sale of an investment in common stock.
- (2) The loan had previously been valued at zero due to its uncertainty of collection.
- (3) Penalties related to prepayment of a \$42.3 million mortgage loan collateralized against certain California real estate properties, which was to mature on January 1, 2007.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. RETIREMENT PLANS

Defined Benefit Pension Plans

Teradyne has defined benefit pension plans covering a majority of domestic employees and employees of certain non-U.S. subsidiaries. Benefits under these plans are based on employees' years of service and compensation. Teradyne's funding policy is to make contributions to the plans in accordance with local laws and to the extent that such contributions are tax deductible. The assets of these plans consist primarily of equity and fixed income securities. In addition, Teradyne has an unfunded supplemental executive defined benefit plan in the United States to provide retirement benefits in excess of levels allowed by the Employment Retirement Income Security Act (ERISA) and the Internal Revenue Code (the "IRC"), as well as unfunded foreign plans.

Teradyne uses a December 31 measurement date for all of its plans. The December 31 balances of these defined benefit pension plan assets and obligations are shown below:

	<u>2004</u>	<u>2003</u>
	(in thousands)	
<b>ASSETS AND OBLIGATIONS</b>		
<b>Change in benefit obligation:</b>		
Projected benefit obligation:		
Beginning of year	\$244,101	\$ 237,167
Service cost	6,581	6,687
Interest cost	13,883	13,835
Actuarial (gain) loss	7,148	(10,824)
Benefits paid	(7,812)	(8,433)
Plan amendment	300	1,874
Non U.S. currency movement	2,494	3,795
End of year	<u>266,695</u>	<u>244,101</u>
<b>Change in plan assets:</b>		
Fair value of plan assets:		
Beginning of year	131,767	106,292
Company contributions	38,820	11,854
Plan participants' contributions	65	64
Actual return	15,742	20,957
Benefits paid	(7,812)	(8,433)
Non U.S. currency movement	637	1,033
End of year	<u>179,219</u>	<u>131,767</u>
Funded status	(87,476)	(112,334)
Unrecognized prior service cost	5,845	6,424
Unrecognized net transition obligation	81	176
Unrecognized net actuarial loss	85,225	83,719
Net amount recognized	<u>\$ 3,675</u>	<u>\$ (22,015)</u>

The following table provides amounts recognized in the statement of financial position as of December 31:

	<u>2004</u>	<u>2003</u>
	(in thousands)	
Accrued pension liability	\$(69,187)	\$(93,878)
Intangible asset	5,382	6,645
Accumulated other comprehensive loss	67,480	65,218
Net amount recognized	<u>\$ 3,675</u>	<u>\$(22,015)</u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. RETIREMENT PLANS—(Continued)

The accumulated benefit obligation for all defined pension plans was \$245.2 million and \$222.7 million at December 31, 2004 and 2003, respectively.

Information for pension plans with an accumulated benefit obligation in excess of plan assets:

	2004	2003
	(in millions)	
Projected benefit obligation	\$266.7	\$244.1
Accumulated benefit obligation	\$245.2	\$222.7
Fair value of plan assets	\$179.2	\$131.8

EXPENSE

For the years ended December 31, 2004, 2003 and 2002, Teradyne's net pension benefit costs were comprised of:

	2004	2003	2002
	(in thousands)		
<b>Components of Net Periodic Benefit Cost:</b>			
Service cost	\$ 6,581	\$ 6,687	\$ 6,140
Interest cost	13,883	13,835	12,702
Expected return on plan assets	(12,959)	(11,061)	(11,232)
Amortization of unrecognized:			
Net transition obligation	86	110	78
Prior service cost	879	859	734
Net loss	3,293	3,739	357
Total expense	<u>\$ 11,763</u>	<u>\$ 14,169</u>	<u>\$ 8,779</u>

ADDITIONAL INFORMATION

	2004	2003
	(in millions)	
Increase / (decrease) in minimum pension liability included in other comprehensive income	\$2.3	\$(13.4)

WEIGHTED AVERAGE ASSUMPTIONS TO DETERMINE NET PERIODIC BENEFIT COST

	United States Plan			Foreign Plans		
	2004	2003	2002	2004	2003	2002
Discount rate	6.0%	6.0%	7.0%	5.0%	5.2%	5.2%
Expected return on plan assets	8.0	8.0	9.0	4.9	5.0	5.0
Salary progression rate	4.0	5.0	5.0	3.2	3.3	3.3

WEIGHTED AVERAGE ASSUMPTIONS TO DETERMINE BENEFIT OBLIGATIONS

	United States Plan			Foreign Plans		
	2004	2003	2002	2004	2003	2002
Discount rate	5.75%	6.0%	6.0%	4.4%	5.0%	5.2%
Salary progression rate	4.0	4.0	5.0	2.8	3.2	3.3

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. RETIREMENT PLANS—(Continued)

In developing the expected return on plan assets assumption, Teradyne evaluated input from its investment manager and pension consultants, including their review of historical markets and long-term historical relationships between equities and fixed-income. Current market factors such as inflation and interest rates were evaluated before long-term capital market assumptions were determined. The long-term portfolio return was established with proper consideration of asset diversification and rebalancing. Peer data and historical returns were reviewed to check for reasonableness and appropriateness. Teradyne also considered its historical 15-year compounded return of 8.41% for the period ending December 31, 2003, which has been in excess of the broad equity and bond benchmark indices. Based on these historical returns, Teradyne believes that 8.0% was an appropriate rate to use for fiscal 2004.

Teradyne bases its determination of pension expense or income on a market-related valuation of assets, which reduces year-to-year volatility. This market-related valuation recognizes investment gains or losses over a five-year period from the year in which they occur. Investment gains or losses for this purpose are the difference between the expected return calculated using the market-related value of assets and the actual return on assets. Since the market-related value of assets recognizes gains or losses over a five-year period, the future value of assets will be impacted as previously deferred gains or losses are recognized. As of December 31, 2004 in the U.S. Qualified Pension Plan Teradyne had cumulative losses of approximately \$6.2 million, which remain to be recognized in the calculation of the market-related value of assets. The discount rate that Teradyne utilized for determining future pension obligations under the U.S. Qualified Pension Plan is based on the Citigroup Pension Liability Index (formerly Salomon Brothers Pension Liability Index), which was at 5.68% at December 31, 2004, down from 6.00% at December 31, 2003. As a result, Teradyne selected 5.75% for its December 31, 2004 discount rate. Each year Teradyne considers the Citigroup Pension Liability Index, along with other indices including the Moody's AA rated corporate bond yield and the Citigroup 10+ Year AAA/AA rate.

PLAN ASSETS

Teradyne's weighted average asset allocation at December 31, 2004 and 2003, by asset category is as follows:

	United States Plan		Foreign Plans	
	2004	2003	2004	2003
Equity Securities .....	48.1%	47.5%	72.4%	78.9%
Debt Securities .....	51.9	52.5	14.0	16.0
Other .....	—	—	13.6	5.1
Total .....	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Teradyne employs a total return investment approach for its pension plan assets whereby a mix of equities and fixed income investments are used to ensure the preservation of capital and to maximize the long-term return of plan assets for a prudent level of risk. The investment portfolio contains a diversified blend of equity and fixed income investments. The investment portfolio will not at any time have a direct investment in Teradyne stock. It may have an indirect investment in Teradyne stock, if one of the funds selected by the investment manager invests in Teradyne stock.

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**N. RETIREMENT PLANS—(Continued)**

The target asset allocation and index for each asset category for the U.S. Qualified Pension Plan, per policy, for the portfolio is as follows:

<b>Asset Category:</b>	<b>Policy Index:</b>	<b>Target</b>
Equity (Large cap)	S&P 500 Stock Index	22%
Equity (Small cap)	Russell 2000 Index	10
International Equity	MSCI EAFE Index (Net Dividends)	15
Passive Fixed Income	Lehman Aggregate Bond Index	33
High-Yield Fixed Income	Lehman Brothers High Yield Bond Index	10
Treasury Inflation-Linked Fixed Income	Lehman Brothers US TIPS Index	10

Teradyne's U.S. Qualified Pension Plan asset allocation as of December 31, 2004 was 48.1% invested in equity securities and 51.9% invested in fixed income securities. Teradyne's investment manager regularly reviews Teradyne's actual asset allocation and periodically rebalances Teradyne's portfolio to ensure alignment to the targeted allocation.

The investment return objectives are to achieve a rate of return, which exceeds the rate of inflation, as measured by the Consumer Price Index by 3% per year, and to avoid excessive volatility and produce a rate of return that at least matches the Policy Index identified above.

The manager's investment performance is reviewed at least annually. Results for the total portfolio and for each major category of assets are evaluated in comparison with appropriate market indices, the Policy Index, other similarly managed portfolios and the Consumer Price Index.

The assets of Teradyne's foreign pension plans are invested in funds which seek to combine long-term growth potential offered through equity exposure with the relative security provided by equity, bonds and cash.

**Contributions**

Teradyne's funding policy is to make contributions to the plans in accordance with local laws and to the extent that such contributions are tax deductible. During 2004, 2003 and 2002, Teradyne contributed \$38.8 million, \$11.9 million and \$10.5 million to the plans, respectively. Teradyne plans to contribute approximately \$30.0 million in 2005 to this plan.

**Expected Future Benefits Payments**

The following benefit payments, which reflect future service, as appropriate, are expected to be paid:

	<u>United States</u>	<u>Foreign</u>
	(in thousands)	
2005 .....	\$ 7,857	\$ 754
2006 .....	8,605	1,406
2007 .....	9,488	1,149
2008 .....	10,377	1,941
2009 .....	11,075	2,305
2010-2014 .....	68,432	11,131

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. RETIREMENT PLANS—(Continued)

POST RETIREMENT BENEFIT PLANS

In addition to receiving pension benefits, U.S. Teradyne employees who meet retirement eligibility requirements as of their termination dates may participate in Teradyne's Welfare Plan, which includes death, and medical and dental benefits up to age 65. Death benefits provide a fixed sum to retirees' survivors and is available to all retirees. Substantially all of Teradyne's current U.S. employees could become eligible for these benefits, and the existing benefit obligation relates primarily to those employees.

Teradyne uses a December 31 measurement date for its plan. The December 31 balances of the post retirement assets and obligations are shown below:

ASSETS AND OBLIGATIONS	<u>2004</u>	<u>2003</u>
<b>Change in benefit obligation:</b>	(in thousands)	
Projected benefit obligation:		
Beginning of year .....	\$ 34,406	\$ 33,747
Service cost .....	1,293	1,112
Interest cost .....	2,008	1,858
Actuarial (gain) loss .....	5,079	2,490
Benefits paid .....	(3,131)	(2,969)
Plan amendment .....	<u>(5,253)</u>	<u>(1,832)</u>
End of year .....	\$ 34,402	\$ 34,406
<b>Change in plan assets:</b>		
Fair value of plan assets:		
Beginning of year .....	\$ —	\$ —
Company contributions .....	3,131	2,969
Benefits paid .....	<u>(3,131)</u>	<u>(2,969)</u>
End of year .....	\$ —	\$ —
Funded status .....	\$(34,402)	\$(34,406)
Unrecognized prior service cost .....	(3,808)	(924)
Unrecognized net transition obligation .....	—	2,584
Unrecognized net actuarial loss .....	<u>15,551</u>	<u>10,934</u>
Net amount recognized .....	<u><u>\$(22,659)</u></u>	<u><u>\$(21,812)</u></u>

The following table provides amounts recognized in long-term other accrued liabilities in the statement of financial position as of December 31:

	<u>2004</u>	<u>2003</u>
	(in thousands)	
Accrued post retirement benefit costs .....	\$(22,659)	\$(21,812)

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. RETIREMENT PLANS—(Continued)

EXPENSE

For the years ended December 31, 2004, 2003 and 2002, Teradyne's net post retirement benefit costs were comprised of:

	2004	2003	2002
	(in thousands)		
<b>Components of Net Periodic Benefit Cost:</b>			
Service cost .....	\$1,293	\$1,112	\$1,003
Interest cost .....	2,008	1,858	1,924
Amortization of unrecognized:			
Net transition obligation .....	239	288	287
Prior service cost .....	(101)	(73)	79
Net loss .....	539	373	140
Total expense .....	<u>\$3,978</u>	<u>\$3,558</u>	<u>\$3,433</u>

WEIGHTED AVERAGE ASSUMPTIONS TO DETERMINE NET PERIODIC BENEFIT COST

	2004	2003	2002
Discount rate .....	6.0%	6.0%	7.0%
Initial medical trend .....	9.0	9.0	9.0
Ultimate medical trend .....	5.0	5.0	5.0
Medical cost trend rate decrease to ultimate rate in year .....	2008	2007	2006

WEIGHTED AVERAGE ASSUMPTIONS TO DETERMINE BENEFIT OBLIGATION

	2004	2003	2002
Discount rate .....	5.75%	6.0%	6.0%
Initial medical trend .....	10.0	9.0	9.0
Ultimate medical trend .....	5.0	5.0	5.0
Medical cost trend rate decrease to ultimate rate in year .....	2010	2008	2007

Assumed health care trend rates could have a significant effect on the amounts reported for health care plans. A one percentage point change in the assumed health care cost trend rates for the year ended December 31, 2004 would have the following effects:

	1 Percentage Point Increase	1 Percentage Point Decrease
	(in thousands)	
Effect on total service and interest cost components .....	\$ 558	\$ (490)
Effect on postretirement benefit obligations .....	\$4,025	\$(3,750)

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**N. RETIREMENT PLANS—(Continued)**

**Expected Future Benefits Payments**

The following benefit payments, which reflect future service, as appropriate, are expected to be paid:

	<b>Benefits</b>
	<b>(in thousands)</b>
2005 .....	\$ 3,338
2006 .....	3,266
2007 .....	3,233
2008 .....	3,192
2009 .....	3,099
2010-2014 .....	14,903

The Medicare Prescription Drug, Improvement and Modernization Act (the "Act") was signed into law on December 8, 2003. It created a new Medicare prescription drug benefit (Medicare Part D) and a federal subsidy to sponsors of retiree healthcare plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. Both the Medicare Part D benefit and the federal subsidy programs will become operational starting in 2006. On January 21, 2005, the Centers for Medicare and Medicaid Services released the final regulations implementing the Act including guidance on determining whether a benefit plan is actuarially equivalent to Medicare Part D. The issuance of the final regulations did not have a material impact on Teradyne's financial position and results of operations.

**O. COMMON STOCK REPURCHASE PROGRAM**

On November 16, 2000, Teradyne's Board of Directors authorized the repurchase of an additional 10.0 million shares, resulting in an aggregate authorization for Teradyne to repurchase up to 30.0 million shares of Teradyne's stock on the open market. During 2000, Teradyne repurchased 3.8 million shares at a cost of \$147.5 million, increasing the cumulative shares purchased under this program through 2000 to 20.0 million shares at an aggregate cost of \$540.8 million. During 2004, 2003 and 2002, Teradyne did not repurchase any stock. Teradyne recorded treasury stock at its acquisition cost.

Effective July 1, 2004, the Massachusetts Business Corporation Act was revised to eliminate the use of treasury shares by Massachusetts corporations. As a result, all of Teradyne's treasury shares were automatically converted to unissued shares on July 1, 2004.

**P. STOCK BASED COMPENSATION**

**Stock Option Plans**

Under its stock option plans, all of which are fixed accounting plans, Teradyne grants options to purchase common stock at 100% of the fair market value on the date of grant. Options granted to employees prior to September 2001 vest in equal installments over four years and have a maximum term of five years. Beginning in September 2001, options granted to employees vest in equal installments over four years and have a maximum term of seven years. In addition, in 2001, Teradyne made a one-time option grant to all employees that vested over two years and has a term of seven years. Options granted to non-employee directors prior to February 5, 2001 vest in equal installments over four years and have a maximum term of five years. Options granted to non-employee directors on or after February 5, 2001 are immediately vested, fully exercisable and have a maximum term of either five or seven years.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

P. STOCK BASED COMPENSATION—(Continued)

Stock option plan activity for the years 2004, 2003 and 2002 follows:

	2004	2003	2002
	(in thousands)		
Outstanding at January 1	29,923	33,421	29,750
Options granted	7,017	6,659	7,205
Options exercised	(677)	(7,115)	(1,152)
Options canceled	(5,246)	(3,042)	(2,382)
Outstanding at December 31	<u>31,017</u>	<u>29,923</u>	<u>33,421</u>
Exercisable at December 31	<u>18,271</u>	<u>16,949</u>	<u>19,296</u>
Available for grant at January 1	21,401	25,018	29,841
Grants	(7,017)	(6,659)	(7,205)
Cancellations	5,246	3,042	2,382
Additional shares reserved	—	—	—
Available for grant at December 31	<u>19,630</u>	<u>21,401</u>	<u>25,018</u>

Weighted average option exercise price information for the years 2004, 2003 and 2002 follows:

	2004	2003	2002
Outstanding at January 1	\$23.11	\$23.41	\$25.28
Options granted	26.15	11.81	18.09
Options exercised	16.47	11.47	15.79
Options canceled	30.33	28.67	35.31
Outstanding at December 31	22.72	23.11	23.41
Exercisable at December 31	24.50	27.06	23.38

Significant option groups outstanding at December 31, 2004 and related weighted average price and remaining contractual life information follows:

Range Of Exercise Prices	Options Outstanding		Options Exercisable	
	Weighted-Average Remaining Contractual Life (Years)	Shares	Weighted-Average Exercise Price	Shares
			(options in thousands)	
\$ 3.82–\$17.48	4.97	11,172	\$14.47	5,167
\$17.57–\$27.06	4.89	13,049	24.08	6,551
\$27.40–\$60.59	1.38	6,249	29.43	6,006
\$61.50–\$166.98	0.80	547	82.23	547
Total	4.14	<u>31,017</u>	\$22.72	<u>18,271</u>

**Employee Stock Purchase Plan**

Under the Teradyne 1996 Employee Stock Purchase Plan, eligible employees may purchase shares of common stock through regular payroll deductions of up to 10% of their compensation. Under the plan, the price paid for the common stock is equal to 85% of the lower of the fair market value of Teradyne's common stock on the first business day in January (July for new hires) or the last business day of December. In January 2005, Teradyne issued 1.3 million shares of common stock to employees who participated in the plan during 2004 at a weighted-average price of \$14.55 per share. On November 9, 2004, the Board of Directors approved a plan amendment which replaced the existing twelve (12) month purchase period with two six (6) month purchase periods, effective January 1, 2005. Currently, there are 4.1 million shares reserved for issuance under this plan.

## TERADYNE, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### Q. SAVINGS PLAN

Teradyne sponsors an employee retirement Savings Plan covering substantially all U.S. employees. Under Teradyne's savings plan, employees may contribute up to 15% of their compensation (subject to Internal Revenue Service limitations). Teradyne annually matches employee contributions up to 6% of such compensation at rates ranging from 50% to 100% for employees in the defined benefit plan. For all other employees, Teradyne annually matches up to 5% of such compensation at rates ranging from 100% to 150%. Teradyne's contributions vest 25% per year for the first four years of employment, and contributions for those employees with four years of service vest immediately. Teradyne also has established an unfunded Supplemental Savings Plan to provide savings benefits in excess of those allowed by ERISA and the IRC. The provisions of this plan are the same as the Savings Plan. Under Teradyne's savings plans, amounts charged to operations were \$13.8 million in 2004, \$11.8 million in 2003 and \$14.2 million in 2002.

#### R. STOCKHOLDER RIGHTS PLAN

Teradyne's Board of Directors adopted a Stockholders Rights Plan on November 16, 2000, under which a dividend of one Common Stock Purchase Right (each a "Right") was declared for and attached to each outstanding share of Common Stock held by stockholders of record as of November 27, 2000. The Rights are transferable with the shares of Common Stock until the Rights become exercisable. Shares of Common Stock issued after November 27, 2000 also contain such Rights. The Rights become exercisable upon the earlier to occur of (a) a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired beneficial ownership of 20% or more of Teradyne's outstanding shares of Common Stock; or (b) ten business days, or a later date as determined by the Board of Directors, following the commencement or announcement by a person or group of an intention to make a tender or exchange offer that would result in beneficial ownership by such person or group of 20% or more of Teradyne's outstanding shares of Common Stock. The plan entitles Right holders to purchase shares of Teradyne's common stock for \$540 per share subject to adjustment (the "Purchase Price") once the Rights become exercisable. Under some circumstances, the Plan entitles Right holders (other than an Acquiring Person or Adverse Party) to purchase Common Stock (or other securities or consideration owned by Teradyne) having a value equal to two times the Purchase Price of the Right for the Purchase Price, once the Rights become exercisable. As of December 31, 2004, none of the Rights are exercisable. The Rights expire on November 27, 2010.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

S. INCOME TAXES

The components of income (loss) before income taxes and the provision for (benefit from) income taxes as shown in the consolidated statements of operations are as follows:

	2004	2003	2002
	(in thousands)		
Income (loss) before income taxes:			
United States .....	\$128,213	\$(192,549)	\$(585,550)
Non U.S. ....	59,761	6,356	24,605
	<u>\$187,974</u>	<u>\$(186,193)</u>	<u>\$(560,945)</u>
Provision (credit) for income taxes:			
Current:			
U.S. Federal .....	\$ 7,986	\$ 1,316	\$ 9,155
Non U.S. ....	14,067	7,797	2,408
State .....	1,296	700	635
	<u>23,349</u>	<u>9,813</u>	<u>12,198</u>
Deferred:			
U.S. Federal .....	—	—	126,513
Non U.S. ....	(612)	(2,013)	6,796
State .....	—	—	12,017
	<u>(612)</u>	<u>(2,013)</u>	<u>145,326</u>
	<u>\$ 22,737</u>	<u>\$ 7,800</u>	<u>\$ 157,524</u>

Significant components of Teradyne's deferred tax assets (liabilities) as of December 31, 2004 and 2003 are as follows:

	2004	2003
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards .....	\$ 241,737	\$ 309,981
Tax credits .....	26,603	25,401
Inventory valuations .....	37,920	58,565
Accruals .....	19,628	33,478
Research and development .....	100,361	14,077
Vacation accrual .....	8,441	8,011
Deferred revenue .....	598	4,292
Pension liability .....	18,182	28,063
Other .....	6,161	11,022
Gross deferred tax assets .....	<u>459,631</u>	<u>492,890</u>
Less: valuation allowance .....	<u>(426,731)</u>	<u>(475,104)</u>
Total deferred tax assets .....	<u>32,900</u>	<u>17,786</u>
Deferred tax liabilities:		
Excess of tax over book depreciation .....	(14,214)	(6,337)
Amortization .....	(14,975)	(7,249)
Other .....	(1,086)	(2,187)
Total deferred tax liabilities .....	<u>(30,275)</u>	<u>(15,773)</u>
Net deferred assets .....	<u>\$ 2,625</u>	<u>\$ 2,013</u>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

S. INCOME TAXES—(Continued)

At December 31, 2004 Teradyne had operating loss carryforwards that expire in the following years:

	U.S. Federal Operating Loss Carryforwards	State Net Operating Loss Carryforwards (in thousands)	Foreign Net Operating Loss Carryforwards
2005 .....	\$ —	\$ —	\$ —
2006 .....	—	32,298	1,099
2007 .....	5,046	51,809	1,902
2008 .....	3,840	17,239	554
2009 .....	4,774	7,535	938
2010 .....	882	—	—
2011 .....	119	24,203	—
2012 .....	—	52,276	77
2013 .....	—	24,041	—
2014 .....	—	8,586	—
2016 .....	—	—	—
2020 .....	68,000	—	—
2021 .....	20,138	2,192	—
2022 .....	416,801	1,841	—
2023 .....	129,834	969	—
Non-expiring .....	—	—	5,940
Total .....	<u>\$649,434</u>	<u>\$222,989</u>	<u>\$10,510</u>

Of the U.S. Federal operating loss carryforwards, \$101.7 million relates to the acquisition of GenRad in 2001. The GenRad losses are limited in the amount that can be used as a result of "change in ownership" rules as defined in the Internal Revenue Code of 1986.

Teradyne has approximately \$26.6 million of tax credit carryforwards. Business tax credits of approximately \$12.6 million expire in the years 2019 through 2020. Teradyne has foreign tax credits of approximately \$5.9 million expiring 2005 through 2009 and alternative minimum tax credits of approximately \$8.1 million, which do not expire.

During 2004, Teradyne's valuation account decreased by \$48.4 million primarily as a result of Teradyne utilizing operating loss carryforwards against taxable income generated in 2004. During 2003, Teradyne's valuation account increased by \$113.8 million primarily as a result of Teradyne not recording an income tax benefit against the loss in 2003. Due to the continued uncertainty of realization, Teradyne maintained its valuation allowance at December 31, 2003 and 2004, Teradyne does not expect to significantly reduce its valuation allowance until sufficient positive evidence, including sustained profitability, exists that realization is more likely than not.

For the year ended December 31, 2002, Teradyne recorded a tax provision of \$157.5 million resulting in a tax rate of 28%. The tax rate of 28% is primarily due to the recording of a provision for income taxes to establish a valuation allowance against net deferred tax assets. In the fourth quarter of 2002, Teradyne recorded a tax provision to establish a valuation allowance against its net deferred tax assets. The valuation allowance was determined in accordance with the provisions of SFAS No. 109 which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. The evidence that Teradyne reviewed during the fourth quarter of 2002 included actual revenues and

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**S. INCOME TAXES—(Continued)**

net loss for the fiscal year 2002 compared to earlier Teradyne forecasts, the inability to get to break-even during 2002 despite implementing several restructuring programs and a reduction in revenues and an increase in the loss forecasted for the fiscal year 2003. As a result of its review undertaken at December 31, 2002, Teradyne concluded under applicable accounting criteria that it was more likely than not that its deferred tax assets would not be realized. The valuation allowance includes \$42.8 million for net deferred tax assets resulting from minimum pension liabilities and other direct charges or credits to equity.

A reconciliation of the effective tax rate for the years 2004, 2003 and 2002 follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
U.S. statutory federal tax rate .....	35.0%	(35.0)%	(35.0)%
State income taxes, net of federal tax benefit .....	0.7	0.4	(0.6)
Foreign taxes .....	(2.2)	3.1	0.8
Export sales corporation .....	1.6	—	(0.1)
Federal income tax audit .....	1.8	—	—
Nondeductible goodwill .....	—	—	4.9
Valuation allowance .....	(27.2)	35.0	58.9
Other, net .....	<u>2.4</u>	<u>0.7</u>	<u>(0.9)</u>
	<u>12.1%</u>	<u>4.2%</u>	<u>28.0%</u>

As of December 31, 2004, a deferred tax liability has not been established for approximately \$164.6 million of cumulative undistributed earnings of non-U.S. subsidiaries. On October 22, 2004, the President signed the American Jobs Creation Act of 2004 ("the Act"). The Act creates a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad by providing an 85 percent dividends received deduction for certain dividends from controlled foreign corporations. The deduction is subject to a number of limitations and, as of today, uncertainty remains as to how to interpret numerous provisions in the Act. As such, Teradyne is not yet in a position to decide on whether, and to what extent, it might repatriate foreign earnings that have not yet been remitted to the U.S. Based on Teradyne's analysis to date, however, it is reasonably possible that it may repatriate some amount between \$60.0 million to \$100.0 million, with the respective tax liability ranging from \$0 to \$5.3 million. Teradyne expects to be in a position to finalize our assessment by June 30, 2005.

**T. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION**

Teradyne has four reportable segments and five operating segments with Diagnostic Test Systems and Broadband Test Systems combined as Other Test Systems. The four reportable segments are the design, manufacturing and marketing of Semiconductor Test Systems, Connection Systems, Assembly Test Systems and Other Test Systems. These reportable segments were determined based upon the nature of the products and services offered. The Other Test Systems segment is comprised of Broadband Test Systems and Diagnostic Solutions.

Teradyne evaluates performance based on several factors, of which the primary financial measure is business segment income before taxes. The accounting policies of the business segments are the same as those described in "Note B: Accounting Policies." Intersegment revenue is accounted for at fair value as if revenue were to third parties. During 2004, 2003 and 2002 no individual customer accounted for more than 10% of consolidated net revenue.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

T. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION—(Continued)

	Semiconductor Test Systems Segment	Connection Systems Segment	Assembly Test Systems Segment	Other Test Systems Segment	Corporate And Eliminations	Consolidated
	(in thousands)					
<b>2004</b>						
Net revenue to unaffiliated customers .....	\$1,146,303	\$381,659	\$ 155,166	\$108,752	\$ —	\$1,791,880
Intersegment revenue .....	—	28,962	—	—	(28,962)	—
Net revenue .....	1,146,303	410,621	155,166	108,752	(28,962)	1,791,880
Income (loss) before taxes(1)(2) .....	199,387	25,245	10	6,830	(43,498)	187,974
Total assets(3) .....	731,862	256,137	159,908	65,021	709,634	1,922,562
Property additions(4) .....	140,189	10,671	2,083	2,088	10,214	165,245
Depreciation and amortization expense(4) .....	77,845	25,165	6,968	2,496	11,834	124,308
<b>2003</b>						
Net revenue to unaffiliated customers .....	\$ 735,480	\$357,173	\$ 151,562	\$108,652	—	\$1,352,867
Intersegment revenue .....	—	41,103	—	—	\$(41,103)	—
Net revenue .....	735,480	398,276	151,562	108,652	(41,103)	1,352,867
(Loss) income before taxes(1)(2) .....	(60,133)	(35,973)	(72,778)	2,490	(19,799)	(186,193)
Total assets(3) .....	677,926	259,964	159,339	56,294	631,839	1,785,362
Property additions(4) .....	55,384	12,669	4,341	2,244	6,547	81,185
Depreciation and amortization expense(4) .....	61,446	47,540	16,335	4,558	22,609	152,488
<b>2002</b>						
Net revenue to unaffiliated customers .....	\$ 557,623	\$396,993	\$ 170,759	\$ 96,861	—	\$1,222,236
Intersegment revenue .....	—	10,525	—	—	\$(10,525)	—
Net revenue .....	557,623	407,518	170,759	96,861	(10,525)	1,222,236
(Loss) income before taxes(1)(2) .....	(266,134)	(79,601)	(200,401)	1,160	(15,969)	(560,945)
Total assets(3) .....	720,228	317,153	209,541	58,344	594,884	1,900,150
Property additions(4) .....	48,681	21,885	1,076	968	3,749	76,359
Depreciation and amortization expense(4) .....	61,765	62,115	16,242	3,575	15,992	159,689

- (1) Income (loss) before taxes of the principal businesses exclude the effects of employee profit sharing, management incentive compensation, other unallocated expenses and net interest and other income, which are included in Corporate and Eliminations.
- (2) Included in income (loss) before taxes for the following segments are charges that include restructuring and other charges, accelerated depreciation, impairment of goodwill, investments, mortgage and other penalties, repayment of a loan, inventory provision recovery and inventory writedowns.

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

T. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION—(Continued)

Included in the Semiconductor Test Systems segment are charges for the following:

	For the Year Ended December 31,		
	2004	2003	2002
	(in thousands)		
Cost of revenues—inventory .....	\$5,212	\$ 1,208	\$ 27,867
Engineering and development—accelerated depreciation .....	—	526	452
Selling and administrative—accelerated depreciation .....	66	191	135
Restructuring charges .....	337	11,523	32,935
<b>Total .....</b>	<b>\$5,615</b>	<b>\$13,448</b>	<b>\$ 61,389</b>

Included in the Connection Systems segment are charges for the following:

	For the Year Ended December 31,		
	2004	2003	2002
	(in thousands)		
Cost of revenues—inventory .....	\$ 726	\$ 1,018	\$ 3,808
Cost of revenues—accelerated depreciation .....	—	1,827	4,507
Restructuring charges .....	4,148	27,581	54,511
Gain on sale of a business .....	(865)	—	—
<b>Total .....</b>	<b>\$4,009</b>	<b>\$30,426</b>	<b>\$ 62,826</b>

Included in the Assembly Test Systems segment are charges for the following:

	For the Year Ended December 31,		
	2004	2003	2002
	(in thousands)		
Cost of revenues—inventory .....	\$2,671	\$ 9,050	\$ 7,020
Cost of revenues—accelerated depreciation .....	—	2,884	1,160
Engineering and development—accelerated depreciation .....	—	960	386
Selling and administrative—accelerated depreciation .....	—	1,774	714
Restructuring charges .....	(411)	29,032	33,124
Goodwill impairment .....	—	—	78,936
<b>Total .....</b>	<b>\$2,260</b>	<b>\$43,700</b>	<b>\$121,340</b>

Included in the Other Test Systems segment are charges for the following:

	For the Year Ended December 31,		
	2004	2003	2002
	(in thousands)		
Cost of revenues—inventory .....	\$ 494	\$ 1,167	\$ 326
Restructuring charges .....	289	2,501	2,149
<b>Total .....</b>	<b>\$ 783</b>	<b>\$ 3,668</b>	<b>\$ 2,475</b>

TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

T. OPERATING SEGMENT AND GEOGRAPHIC INFORMATION—(Continued)

Included in the Corporate and Eliminations segment are charges for the following:

	For the Year Ended December 31,		
	2004	2003	2002
	(in thousands)		
Selling and administrative—accelerated depreciation	\$ —	\$ 4,394	\$ 295
Restructuring charges	996	647	2,521
Other income and expense, net	(585)	(2,874)	(310)
Total	<u>\$ 411</u>	<u>\$ 2,167</u>	<u>\$ 2,506</u>

- (3) Total business assets are directly attributable to each business. Corporate assets consist of cash and cash equivalents, marketable securities, unallocated fixed assets of support divisions and common facilities and certain other assets.
- (4) Corporate property additions and depreciation and amortization expense include items attributable to the unallocated fixed assets of support divisions and common facilities.

Information as to Teradyne's revenue in different geographical areas is as follows:

	2004	2003	2002
	(in thousands)		
Revenue to unaffiliated customers(1):			
United States	\$ 536,187	\$ 503,775	\$ 561,090
Europe	275,887	228,608	224,904
South East Asia	367,598	234,348	139,101
Singapore	232,297	142,979	96,084
Taiwan	266,202	115,914	106,509
Japan	81,634	108,721	71,767
Rest of the World	32,075	18,522	22,781
	<u>\$1,791,880</u>	<u>\$1,352,867</u>	<u>\$1,222,236</u>

- (1) Revenues are attributable to geographic areas based on location of customer site.

Because a substantial portion of Teradyne's revenue is derived from the sales of product manufactured in the United States, long-lived assets located outside the United States are less than 10% of total assets.

U. SUBSEQUENT EVENTS

In January 2005, Teradyne committed to a restructuring plan ("the Plan") as part of an ongoing effort to lower expenses. Pursuant to the Plan, Teradyne believes that it will incur costs for severance and related employee benefits, impairment charges and remaining lease obligations related to a vacated facility, and other charges. The total charges expected to be incurred under the Plan are \$11.0 million. The actions taken in accordance with the Plan are expected to generate cost savings of approximately \$18.4 million annually, primarily in the Connection Systems and Assembly Test segments. Through March 11, 2005, Teradyne has incurred charges of approximately \$8.2 million, related to severance and related employee benefits, remaining lease obligations and related asset impairments, and other charges.

In January 2005, Teradyne repurchased an additional \$20.0 million of the outstanding Notes in open market purchases at negotiated prices, leaving management the ability to repurchase \$71.5 million of the outstanding Notes, at future dates, pursuant to the initial Board of Directors authorization to repurchase up to \$100 million of the outstanding Notes.

**SUPPLEMENTARY INFORMATION**  
(Unaudited)

The following sets forth certain unaudited consolidated quarterly statements of operations data for each of Teradyne's last eight quarters. In management's opinion, this quarterly information reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement for the periods presented. Such quarterly results are not necessarily indicative of future results of operations and should be read in conjunction with the audited consolidated financial statements of Teradyne and the notes thereto included elsewhere herein.

	2004			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1)	(2)	(3)	(4)
	(in thousands, except per share amounts)			
Net Revenue:				
Products .....	\$373,967	\$466,802	\$397,438	\$316,640
Services .....	56,636	59,661	60,362	60,374
Total net revenue .....	430,603	526,463	457,800	377,014
Cost of revenue:				
Cost of products .....	215,402	259,500	227,613	200,981
Cost of services .....	39,226	40,335	41,731	43,219
Gross profit .....	175,975	226,628	188,456	132,814
Operating expenses:				
Engineering and development .....	64,694	66,914	67,243	63,149
Selling and administrative .....	66,242	69,991	70,270	62,073
Restructuring and other charges .....	130	152	(46)	5,123
Gain on sale of business .....	—	(865)	—	—
Total operating expenses .....	131,066	136,192	137,467	130,345
Income from operations .....	44,909	90,436	50,989	2,469
Interest income .....	3,591	3,470	3,784	4,542
Interest expense .....	(4,632)	(4,895)	(4,696)	(4,529)
Other income and expense, net .....	851	426	—	1,259
Income before income taxes .....	44,719	89,437	50,077	3,741
Provision for income taxes .....	4,472	8,944	8,928	393
Net income .....	<u>\$ 40,247</u>	<u>\$ 80,493</u>	<u>\$ 41,149</u>	<u>\$ 3,348</u>
Net income per common share—basic .....	<u>\$ 0.21</u>	<u>\$ 0.41</u>	<u>\$ 0.21</u>	<u>\$ 0.02</u>
Net income per common share—diluted .....	<u>\$ 0.20</u>	<u>\$ 0.39</u>	<u>\$ 0.21</u>	<u>\$ 0.02</u>

- (1) Restructuring and other charges includes a recovery on long-lived asset impairments of \$0.5 million, a decrease in the estimate for severance and related benefits of \$0.3 million and a charge for the settlement of a remaining lease obligation on a facility of \$0.9 million.
- (2) Restructuring and other charges includes a recovery on long-lived asset impairments of \$0.1 million, a decrease in the estimate for severance and related benefits charges of \$0.5 million, an increase in revised estimated losses on leased facilities of \$1.2 million and \$0.5 million reversal of other charges for amounts earned under agreements related to the sale of product lines in prior reporting periods.
- (3) Restructuring and other charges includes long-lived asset impairments of \$0.6 million, severance and related benefits charges of \$0.1 million and \$0.7 million reversal of other charges for amounts earned under agreements related to the sale of product lines in prior reporting periods.
- (4) Restructuring and other charges includes severance and related benefits charges of \$3.6 million, an increase in estimated losses on leased facilities of \$1.0 million, long-lived asset impairments of \$0.9 million, and \$0.4 million reversal of other charges for amounts earned under agreements related to the sale of product lines in prior periods.

2003

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1)	(2)	(3)	(4)
	(in thousands, except per share amounts)			
Net Revenue:				
Products .....	\$277,231	\$271,523	\$271,319	\$295,815
Services .....	57,345	60,006	57,853	61,775
Total net revenue .....	334,576	331,529	329,172	357,590
Cost of revenue:				
Cost of products .....	210,927	203,781	191,519	192,521
Cost of services .....	39,543	39,140	39,103	37,434
Total cost of revenue .....	250,470	242,921	230,622	229,955
Gross Profit .....	84,106	88,608	98,550	127,635
Operating expenses:				
Engineering and development .....	68,585	63,804	61,248	60,963
Selling and administrative .....	67,402	61,512	60,062	60,488
Restructuring and other charges .....	19,486	13,378	23,330	15,090
Total operating expenses .....	155,473	138,694	144,640	136,541
Loss from operations .....	(71,367)	(50,086)	(46,090)	(8,906)
Interest income .....	4,179	3,299	3,510	3,025
Interest expense .....	(5,411)	(5,402)	(5,502)	(4,568)
Other income and expense, net .....	(2,699)	1,400	(3,232)	1,657
Loss before income taxes .....	(75,298)	(50,789)	(51,314)	(8,792)
Provision for income taxes .....	1,200	1,700	2,200	2,700
Net loss .....	<u>\$(76,498)</u>	<u>\$(52,489)</u>	<u>\$(53,514)</u>	<u>\$(11,492)</u>
Net loss per common share—basic and diluted .....	<u>\$ (0.41)</u>	<u>\$ (0.28)</u>	<u>\$ (0.28)</u>	<u>\$ (0.06)</u>

- (1) Restructuring and other charges includes long-lived asset impairments of \$7.5 million, severance and related benefits charges of \$6.2 million and a loss on the sale of product lines of \$5.8 million.
- (2) Restructuring and other charges includes long-lived asset impairments of \$6.5 million, severance and related benefits charges of \$3.4 million, revised estimated losses on leased facilities of \$2.4 million and a loss on the sale of product lines of \$1.1 million.
- (3) Restructuring and other charges includes long-lived asset impairments of \$11.4 million, severance and related benefits charges of \$10.2 million and a \$1.8 million charge primarily for contractual penalties associated with resizing a business.
- (4) Restructuring and other charges includes revised estimated losses on leased facilities of \$9.9 million, long-lived asset impairments of \$4.1 million, severance and related benefits charges of \$1.6 million and other credits of \$0.5 million.

**Item 9: *Changes and disagreements with accountants on accounting and financial disclosure***

None.

**Item 9A: *Controls and procedures***

As of the end of the period covered by this report, Teradyne's management, with the participation of Teradyne's Chief Executive Officer and Teradyne's Chief Financial Officer, evaluated the effectiveness of Teradyne's disclosure controls and procedures pursuant to Rule 13a-15(b) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, Teradyne's Chief Executive Officer and Teradyne's Chief Financial Officer concluded that, as of the end of the period covered by this report, Teradyne's disclosure controls and procedures were effective in ensuring that material information required to be disclosed by Teradyne in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, including ensuring that such material information is accumulated and communicated to Teradyne's management, including Teradyne's Chief Executive Officer and Teradyne's Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

There was no change in Teradyne's internal control over financial reporting during Teradyne's fourth fiscal quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, Teradyne's internal control over financial reporting.

**Management's Annual Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control—Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2004.

Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2004 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears under Item 8 of this Annual Report on Form 10-K. In such report PricewaterhouseCoopers LLP also issued its own assessment of the effectiveness of our internal controls which expresses unqualified opinions on management's assessment and on the effectiveness of our internal control over financial reporting as of December 31, 2004.

**Item 9B: *Other Information***

None.

### PART III

**Item 10: *Directors and executive officers of the registrant.***

Certain information relating to directors and executive officers of Teradyne, committee information, reports and charters, adoption of a code of ethics, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from Teradyne's definitive proxy statement in connection with its Annual Meeting of Shareholders to be held on May 26, 2005, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report and Performance Graph included in such proxy statement are specifically not incorporated herein. (Also see "Item 1: Executive Officers of the Company" elsewhere in this report.)

**Item 11: *Executive compensation.***

Certain information relating to directors and executive officers of Teradyne, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from Teradyne's definitive proxy statement in connection with its Annual Meeting of Shareholders to be held on May 26, 2005, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report and Performance Graph included in such proxy statement are specifically not incorporated herein.

**Item 12: *Security ownership of certain beneficial owners and management.***

Certain information relating to directors and executive officers of Teradyne, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from Teradyne's definitive proxy statement in connection with its Annual Meeting of Shareholders to be held on May 26, 2005, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report and Performance Graph included in such proxy statement are specifically not incorporated herein. Also see "Equity Compensation Plans" in "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations."

**Item 13: *Certain relationships and related transactions.***

Certain information relating to directors and executive officers of Teradyne, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from Teradyne's definitive proxy statement in connection with its Annual Meeting of Shareholders to be held on May 26, 2005, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report and Performance Graph included in such proxy statement are specifically not incorporated herein.

**Item 14: *Principal accountant fees and services.***

Certain information relating to audit fees of Teradyne's independent auditors is incorporated by reference herein from Teradyne's definitive proxy statement in connection with its Annual Meeting of Shareholders to be held on May 26, 2005, which proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the close of the fiscal year. For this purpose, the Audit Committee Report included in such proxy statement is specifically not incorporated herein.

## PART IV

### Item 15: *Exhibits and Financial Statement Schedules.*

#### (a) 1. Financial Statements

The following consolidated financial statements are included in Item 8:

Report of Independent Registered Public Accounting Firm  
Balance Sheets as of December 31, 2004 and 2003  
Statements of Operations for the years ended December 31, 2004, 2003 and 2002  
Statements of Shareholders' Equity for the years ended December 31, 2004, 2003 and 2002  
Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002

#### (a) 2. Financial Statement Schedules

The following consolidated financial statement schedule is included in Item 15(d):

Schedule II—Valuation and Qualifying Accounts

Schedules other than those listed above have been omitted since they are either not required or information is otherwise included.

#### (a) 3. Listing Of Exhibits

The Exhibits which are filed with this report or which are incorporated by reference herein are set forth in the Exhibit Index.

Item 15(d) Financial Statement Schedules

TERADYNE, INC.

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

<u>Column A</u>	<u>Column B</u>	<u>Column C</u>		<u>Column D</u>	<u>Column E</u>
<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Additions</u>		<u>Deductions</u>	<u>Balance at End of Period</u>
		<u>Charged to Cost and Expenses</u>	<u>Charged to Other Accounts</u>		
		(in thousands)			
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Accounts receivable:					
2004 Allowance for doubtful accounts .....	\$ 5,968	\$ —	\$ —	\$ 231	\$ 5,737
2003 Allowance for doubtful accounts .....	\$ 5,749	\$ 1,091	\$ —	\$ 872	\$ 5,968
2002 Allowance for doubtful accounts .....	\$ 6,294	\$ 1,073	\$ —	\$ 1,618	\$ 5,749

<u>Column A</u>	<u>Column B</u>	<u>Column C</u>		<u>Column D</u>	<u>Column E</u>
<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Additions</u>		<u>Deductions</u>	<u>Balance at End of Period</u>
		<u>Charged to Cost and Expenses</u>	<u>Acquisitions and Other</u>		
		(in thousands)			
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Inventory:					
2004 Inventory reserve .....	\$191,071	\$11,335	\$ —	\$48,499	\$153,907
2003 Inventory reserve .....	\$220,824	\$16,569	\$ —	\$46,322	\$191,071
2002 Inventory reserve .....	\$201,869	\$39,021	\$6,460	\$26,526	\$220,824

## EXHIBIT INDEX

The following designated exhibits are, as indicated below, either filed herewith or have heretofore been filed with the Securities and Exchange Commission and are referred to and incorporated by reference to such filings.

<u>Exhibit No.</u>	<u>Description</u>	<u>SEC Document Reference</u>
3.1	Restated Articles of Organization of the Company, as amended	Exhibit 3.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 2, 2000.
3.2	Amended and Restated Bylaws of the Company	Exhibit 3.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
4.1	Rights Agreement between the Company and Fleet National Bank dated as of November 17, 2000	Exhibit 4.1 to the Company's Form 8-K filed November 20, 2000.
4.2	Indenture by and between the Company and State Street Bank and Trust Company as Trustee dated as of October 24, 2001, including the form of Note	Exhibit 4.4 to the Company's Registration Statement on Form S-3 (Registration Statement No. 333-75632).
4.3	Form of Note	Included in Exhibit 4.4 to the Company's Registration Statement on Form S-3 (Registration Statement No. 333-75632).
4.4	Registration Rights Agreement by and between the Company and Goldman, Sachs & Co. and Banc of America Securities LLC dated as of October 24, 2001	Exhibit 4.6 to the Company's Registration Statement on Form S-3 (Registration Statement No. 333-75632).
10.1	Teradyne, Inc. Supplemental Executive Retirement Plan*	Exhibit 10.4 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1997.
10.2	1991 Employee Stock Option Plan, as amended*	Exhibit 4.2 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-07177).
10.3	Amendment to 1991 Stock Plan dated March 9, 2001*	Exhibit 10.3 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2000.
10.4	Megatest Corporation 1990 Stock Option Plan*	Exhibit 4.1 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-64683).
10.5	Megatest Corporation Director Stock Option Plan*	Exhibit 4.2 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-64683).
10.6	1996 Employee Stock Purchase Plan, as amended*	Filed herewith.
10.7	Master Lease Agreement between Megatest and General Electric Capital Corporation dated August 10, 1995	Exhibit 10.10 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995.
10.8	Loan and Security Agreement between Megatest and the CIT Group/Equipment Financing, Inc. dated August 14, 1995	Exhibit 10.11 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995.

<u>Exhibit No.</u>	<u>Description</u>	<u>SEC Document Reference</u>
10.9	Deed of Trust, Financing Statement, Security Agreement and Fixture Filing between Megatest and the Sun Life Assurance Company of Canada (U.S.) dated August 25, 1995	Exhibit 10.12 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995.
10.10	1997 Employee Stock Option Plan, as amended*	Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 1, 2001.
10.11	1996 Non-Employee Director Stock Option Plan, as amended*	Exhibit 10.11 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.12	GenRad, Inc. 1991 Equity Incentive Plan*	Exhibit 4.4 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-73700).
10.13	GenRad, Inc. 1991 Directors' Stock Option Plan*	Exhibit 4.5 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-73700).
10.14	GenRad, Inc. 1997 Non-Qualified Employee Stock Option Plan*	Exhibit 4.6 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-73700).
10.15	GenRad, Inc. Non-Statutory Stock Option Agreement by and between Robert M. Dutkowsky and GenRad, Inc.*	Exhibit 4.7 to the Company's Registration Statement on Form S-8 (Registration Statement No. 333-73700).
10.16	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.16 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.17	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.17 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.18	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.18 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.19	Change in Control Agreement dated March 19, 2002 between the Company and Executive Officer*	Exhibit 10.19 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.20	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.20 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.21	Change in Control Agreement dated October 2, 2001 between the Company and Executive Officer*	Exhibit 10.21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.22	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.22 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.23	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.23 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.

<u>Exhibit No.</u>	<u>Description</u>	<u>SEC Document Reference</u>
10.24	Change in Control Agreement dated October 19, 2001 between the Company and Executive Officer*	Exhibit 10.24 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.25	Promisory Note dated December 19, 2001 between the Company, as borrower, and General Electric Capital Business Asset Funding Corporation, as lender	Exhibit 10.25 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.26	Form of Commercial Deed of Trust, Security Agreement, Assignment of Leases and Rents, and Fixture Filing Agreement dated December 19, 2001 between the Company, as borrower, and General Electric Capital Business Asset Funding Corporation, as lender	Exhibit 10.26 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.27	Form of Assignment of Rents and Leases Agreement dated December 19, 2001 between the Company, as borrower, and General Electric Capital Business Asset Funding Corporation, as lender	Exhibit 10.27 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.28	Form of Certificate and Indemnity Agreement regarding Hazardous Substances dated December 19, 2001 between the Company, as borrower, and General Electric Capital Business Asset Funding Corporation, as lender	Exhibit 10.28 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001.
10.29	Lease Agreements dated July 26, 1996 between GenRad, Inc. and Michelson Farm-Westford Technology Park Trust	Exhibit 10 to GenRad, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 29, 1996 (Commission File No. 1-8045).
10.30	Change in Control Agreement dated January 31, 2003 between the Company and Executive Officer*	Exhibit 10.30 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002.
10.31	Amendment No. 1 to Deferral Plan for Non-Employee Directors*	Exhibit 10.31 to the Company's Quarterly Report on Form 10-Q for the period ended June 29, 2003.
10.32	Change in Control Agreement dated July 2, 2003 between the Company and Executive Officer*	Exhibit 10.32 to the Company's Quarterly Report on Form 10-Q for the period ended June 29, 2003.
10.33	Change in Control Agreement dated January 9, 2004 between the Company and Executive Officer*	Exhibit 10.33 to the Company's Annual Report on Form 10-K for fiscal ended December 31, 2003.
10.34	1996 Non-Employee Director Stock Option Plan as amended and restated*	Filed herewith.
10.35	Employment Agreement between the Company and Eileen Casal*	Exhibit 10.35 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.36	Employment Agreement between the Company and John Casey*	Exhibit 10.36 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.

<u>Exhibit No.</u>	<u>Description</u>	<u>SEC Document Reference</u>
10.37	Employment Agreement between the Company and Mark Jagiela*	Exhibit 10.37 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.38	Employment Agreement between the Company and Michael A. Bradley*	Exhibit 10.38 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.39	Employment Agreement between the Company and Edward Rogas, Jr.*	Exhibit 10.39 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.40	Employment Agreement between the Company and Gregory R. Beecher*	Exhibit 10.40 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.41	Employment Agreement between the Company and Jeffrey R. Hotchkiss*	Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.42	Employment Agreement between the Company and Richard Schneider*	Exhibit 10.42 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.43	Employment Agreement between the Company and Richard MacDonald*	Exhibit 10.43 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.44	Employment Agreement between the Company and George Chamillard*	Exhibit 10.44 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
10.45	Agreement Regarding Termination Benefits between the Company and Michael A. Bradley*	Exhibit 10.45 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.
10.46	Form of Option Agreement relating to the 1991 Employee Stock Option Plan, as amended*	Exhibit 10.46 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.
10.47	Form of Option Agreement relating to the 1997 Employee Stock Option Plan, as amended*	Exhibit 10.47 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.
10.48	Form of Option Agreement relating to the 1996 Non-Employee Director Stock Option Plan, as amended*	Exhibit 10.48 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.
10.49	Variable Compensation Plan for 2005*	Exhibit 99.1 to the Company's Interim Report Form 8-K filed January 28, 2005
14.1	Ethics Policy: Teradyne's Standards of Business Conduct	Exhibit 14.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.
21.1	Subsidiaries of the Company	Filed herewith.
23.1	Consent of PricewaterhouseCoopers LLP	Filed herewith.

<u>Exhibit No.</u>	<u>Description</u>	<u>SEC Document Reference</u>
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
* Indicates management contracts or compensatory plans		

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized this 15th day of March, 2005.

TERADYNE, INC.

By: /s/ GREGORY R. BEECHER  
Gregory R. Beecher,  
Vice President and Chief Financial Officer

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ GEORGE W. CHAMILLARD</u> George W. Chamillard	Chairman of the Board	March 15, 2005
<u>/s/ MICHAEL A. BRADLEY</u> Michael A. Bradley	President and Chief Executive Officer (Principal Executive Officer)	March 15, 2005
<u>/s/ GREGORY R. BEECHER</u> Gregory R. Beecher	Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)	March 15, 2005
<u>/s/ G. RICHARD MACDONALD</u> G. Richard MacDonald	Controller, Principal Accounting Officer	March 15, 2005
<u>/s/ JAMES W. BAGLEY</u> James W. Bagley	Director	March 15, 2005
<u>/s/ ALBERT CARNESALE</u> Albert Carnesale	Director	March 15, 2005
<u>/s/ VINCENT M. O'REILLY</u> Vincent M. O'Reilly	Director	March 15, 2005
<u>/s/ ROY A. VALLEE</u> Roy A. Vallee	Director	March 15, 2005
<u>/s/ PATRICIA S. WOLPERT</u> Patricia S. Wolpert	Director	March 15, 2005

CERTIFICATIONS

I, Michael A. Bradley, certify that:

1. I have reviewed this annual report on Form 10-K of Teradyne, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

By: /s/ Michael A. Bradley  
Michael A. Bradley  
Chief Executive Officer

I, Gregory R. Beecher, certify that:

1. I have reviewed this annual report on Form 10-K of Teradyne, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

By: /s/ Gregory R. Beecher  
Gregory R. Beecher  
Chief Financial Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Teradyne, Inc. (the "Company") on Form 10-K for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael A. Bradley, Chief Executive Officer of the Company, certify pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael A. Bradley

Michael A. Bradley  
Chief Executive Officer

March 15, 2005

**CERTIFICATION PURSUANT TO  
18 U.S.C SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Teradyne, Inc. (the "Company") on Form 10-K for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory R. Beecher, Chief Financial Officer of the Company, certify pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Gregory R. Beecher

Gregory R. Beecher  
Chief Financial Officer

March 15, 2005



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[www.teradyne.com](http://www.teradyne.com)

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