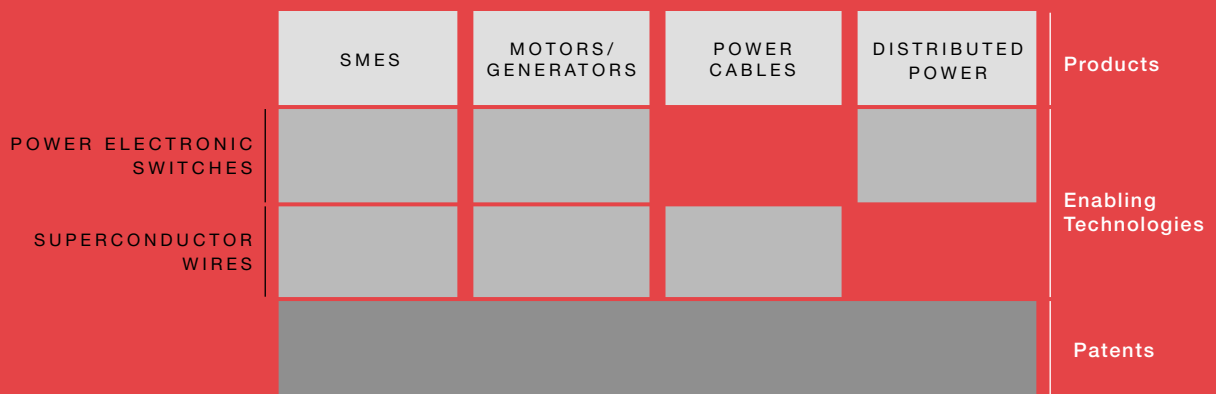


# Solutions for Power Gridlock

American Superconductor owns more than 370 patents and patents pending, and has licenses to over 180 patents and patents pending worldwide. These patents provide a foundation for the company's two core technologies — high temperature superconductor (HTS) wires and power electronic switches — technologies required to meet the power infrastructure needs of the 21<sup>st</sup> century. American Superconductor assembles superconductor wires and power electronic switches into fully integrated products, such as superconducting magnetic energy storage (SMES) systems and ship propulsion motors, for sale directly to end users. It also sells wires and switches for integration into end-use products. For example, it sells wires to Pirelli Cables and Systems, which produces HTS power cables, and power electronic switches to other companies for distributed and dispersed power applications, uninterruptible power supplies and motor drives.



American Superconductor Corporation is a world leader in developing technologies and manufacturing products utilizing superconductor wire and solid-state power electronic switches for the electric power infrastructure. American Superconductor's products, and those sold by electrical equipment manufacturers that incorporate its products, can dramatically increase the bandwidth and reliability of power delivery grids, reduce manufacturing and operating costs, and conserve resources used to produce electric power. Founded in 1987, the company is headquartered in Westborough, Mass. For more information, visit [www.amsuper.com](http://www.amsuper.com).





**ELECTRICITY PIPELINES:  
HTS CABLES GO LIVE IN DETROIT  
EDISON GRID**

Today, HTS wire carries 140 times the power of copper wire of the same dimensions. Using power cables made with these wires, utilities can cost effectively increase the power bandwidth of existing underground rights of way to meet rapidly growing demand for power. HTS cables produced by American Superconductor's partner, Pirelli Cables & Systems, will go live this fall in a downtown Detroit substation serving 14,000 customers.

**EXPANDING POWER BANDWIDTH,  
INCREASING RELIABILITY**

Distributed superconducting magnetic energy storage (D-SMES) units, such as this one at an Entergy Corporation substation outside Houston, enable utilities to increase power flow through existing transmission lines for as little as half the cost of competing solutions. Based on state-of-the-art power electronic switches and superconducting electricity storage coils, SMES systems increase the reliability and power bandwidth of existing transmission lines.



American Superconductor's core products — HTS wire and power electronic switches — are the foundation for 21<sup>st</sup> century power technology solutions.



**SHIP PROPULSION SYSTEMS:  
FULL SPEED AHEAD**

Ship propulsion thrusters such as those pictured here today use conventional motors. Propulsion thrusters incorporating HTS motors offer dramatic opportunities for reducing size, weight and system costs, while increasing maneuverability and operating efficiency. American Superconductor recently entered into collaborations with Litton Ship Systems and ALSTOM Power Conversion, Inc. to develop HTS propulsion systems for commercial and naval ships.

**DISTRIBUTED POWER:  
SOLID-STATE SWITCHES SPARK  
TECHNOLOGICAL ADVANCES**

Distributed power is a key part of the solution to today's electric power constraints. American Superconductor's solid-state power electronic switches control and move large amounts of power in a smaller package and at lower cost than competing solutions. Already deployed in SMES systems, these devices can be custom programmed for many applications at power levels of 50 kilowatts and higher — including wind and microturbines, fuel cells, uninterruptible power supply systems and motor drives.



#### **TO OUR SHAREHOLDERS:**

This past year's rolling blackouts and brownouts, and the national spotlight on power grid constraints have highlighted the inadequacies of today's aging electric power infrastructure. Investments in transmission assets in recent decades have trended downward to the lowest level since the 1930s. With electric power demand expected to increase by 25 percent over the next 10 years, major investments in the power delivery infrastructure must take place to avoid serious transmission and reliability problems. These problems have prompted President Bush's National Energy Policy Development Group to recommend superconductor solutions and the creation of a plan for a national grid by December 2001.

With core technologies that can be applied throughout the power infrastructure, American Superconductor Corporation is well positioned with advanced, cost-effective solutions that address critical power industry problems today. We have a foundation in place and are positioned to benefit from significant growth in investment in the grid over the next 10 to 20 years. As the events of fiscal 2001 have proven, the market is moving with even greater speed in our direction, and the solutions we offer — based on high temperature superconductor (HTS) wire and solid-state power electronic switches — are timelier than ever.

#### **EXPANDING GRID BANDWIDTH**

Our superconducting magnetic energy storage (SMES) product line is ready and available today to help utilities cost effectively increase the power bandwidth of existing transmission grids. Based on our state-of-the-art power electronic switches and superconducting electricity storage coils, SMES systems store electricity and instantaneously deliver large power boosts when voltage sags occur. Momentary voltage sags are a normal part of reliable grid operation. But with today's overloaded grids, these sags can lead to brownouts and blackouts of entire regions. They can also shut down industrial and commercial operations that rely on sensitive microelectronics.

Our SMES product line consists of two primary products. Distributed SMES, or D-SMES, systems are plugged into substations to provide utilities with grid-level solutions to voltage instabilities, thereby preventing brownouts and blackouts and increasing grid power bandwidth. Power Quality SMES, or PQ-SMES, units are sited in industrial or commercial

substations to protect sensitive microelectronics-based manufacturing and data processing equipment from voltage sags. Momentary voltage sags of two seconds or less cause more than 90 percent of all plant shutdowns, which can last from hours to days and be very costly.

Superconductor technology was deployed in a power grid for the first time in July 2000 when six D-SMES units were activated in a Wisconsin Public Service transmission grid. With this D-SMES installation, the power bandwidth of this grid, which has a 200-megawatt (MW) power rating, was increased by as much as 15 percent under peak load. Alliant Energy Corporation, an international energy services provider, deployed D-SMES in a Wisconsin grid later the same month. Entergy Corporation also purchased two D-SMES units during the year, which were installed in a power grid near Houston in June 2001. Entergy placed a follow-on order for two additional units to prepare for anticipated growth in demand on that same grid. With all four SMES units set for operation in the summer of 2002, power bandwidth of this grid, which has a power rating of 1,500 MW, is expected to increase up to 20 percent during peak demand.

Increasing power bandwidth of existing transmission grids with D-SMES can quickly solve peak power demand problems such as those occurring in California. We believe the extra power flow resulting from D-SMES deployment is also attractive to power marketers, with whom we are in discussions regarding appropriate ways to leverage this value proposition.

This past fiscal year we shipped PQ-SMES to our first semiconductor manufacturers, one in Europe and another in North America. Semiconductor manufacturers are fully aware of the high costs of voltage sags and we expect them to become a significant customer base for PQ-SMES.

Last year we formed a strategic marketing and sales alliance with GE Industrial Systems, a business of the General Electric Company (GE), to bring co-branded D-SMES and PQ-SMES products to market. The GE/American Superconductor alliance is strong; senior management of both businesses are committed to growing SMES revenues and establishing these products as solutions of choice in the industrial power quality and transmission grid reliability space.

American Superconductor booked a record \$9.3 million in SMES sales for fiscal 2001, up from \$3.5 million last year, but well below planned revenues for this business. Sales of D-SMES systems were impacted by uncertainty over investments in the grid due to a rapidly changing regulatory environment. PQ-SMES sales were affected by a decline in capital spending among semiconductor manufacturers tied to an overall economic downturn.

Resumption of capital spending among semiconductor manufacturers and other target customers for PQ-SMES products, and sorely needed investments in the grid are inevitable. We are currently in discussions with more than half of the major utilities in the U.S. and many potential PQ-SMES customers. We are confident we are well positioned to benefit once economic and power industry conditions become more favorable. Indeed, the new national focus on upgrading the U.S. power infrastructure and concern over widespread blackouts in the summer of 2001 are strong indicators for more rapid SMES system deployment.

#### **ACTIVE GRID MANAGEMENT**

Solid-state power electronic switches are key building blocks for 21<sup>st</sup> century power technology solutions. Our PowerModule™ line of power electronic switches control and move large amounts of power at considerably higher power density and efficiency, and at lower cost than competing products. PowerModules with a power rating of 250 kilowatts (kW) are key components in SMES systems. During the year, we produced more than 600 PowerModule-250s for our SMES product line.

We developed PowerModules because solid-state switches with the price points and functionality we sought for SMES were not on the market. We expanded our technological base and power electronics intellectual property with the June 2000 acquisition of Integrated Electronics LLC. Based in Wisconsin and now the core of our power electronics business, Integrated Electronics was a co-developer and supplier of PowerModules.

Identifying a broad market opportunity, last fall we introduced PowerModules for use in power technology solutions beyond SMES. PowerModules incorporate a unique printed-circuit board design that can be programmed for specific customer applications at power levels above 50 kW. Target applications include microturbines, fuel cells, wind and solar power generators, uninterruptible power supplies (UPS), variable speed drives for electric motors and drive trains for electric vehicles.

We recently received customer orders for two PowerModules, one for a wind turbine application and another for a battery-backed UPS system. We are currently in discussions with multiple potential customers in the distributed generation, UPS and motor drive market segments, and expect to receive volume orders within the next one to two years. In March we broke ground for a new 50,000-square-foot facility near Milwaukee to house this growing business. By the end of this fiscal year we plan to introduce a full line of PowerModules, with power levels ranging from 50 to 1,000 kW.

#### **WIRED TO SUCCEED...TODAY**

American Superconductor is the world leader in performance and production of HTS wire. Our wires carry at least 140 times the power of copper wire of the same dimensions — a 40 percent improvement in performance during the last year. We believe we produce by far the highest performance, lowest cost HTS wire manufactured today and that we are a good two to three years ahead of the competition in both cost and performance.

We expect to achieve significant manufacturing cost reductions when we begin high-yield production in the world's first commercial HTS wire manufacturing plant in the second half of 2002. Groundbreaking and construction of this plant, located at Devens Commerce Center in Massachusetts, was a major corporate focus this year. Staff and equipment are going into the plant now and we are on target for initial operation in January 2002. The plant will have annual wire production capacity of 10 million meters, scalable to twice that amount as demand grows. Initial commercial sales are expected to be primarily for power cables, motors and generators. A ramp up in commercial sales of any one of these end-use applications will more than consume planned capacity for this plant in the 2003–2005 timeframe.

#### **...AND TOMORROW**

To maintain our leadership position in HTS wires, we plan to continue investing in the development of second-generation wire technology, a research activity we initiated in 1995. Approximately 80 percent of our materials research and development efforts are dedicated to second-generation wire technology. Second-generation wire involves coatings of HTS material on an alloy substrate. Performance is expected to be about the same as that of first-generation wire, but we expect manufacturing costs to be lower by a factor of five. During the year we demonstrated we can achieve performance with our proprietary technology that meets or exceeds our commercial goals. We believe we are on track for commercialization of second-generation wire in the 2005–2006 timeframe, in line with our earlier expectations.

## **INCREASING POWER FLOW**

Power cables made with our HTS wires can carry up to five times more power through existing rights of way than conventional cables. Although HTS power cables generally cost more length for length than conventional cables, the high power capacity of HTS wires translates into better systems economics by avoiding excavation, transformer and real estate costs. These factors make HTS cable especially useful in cities and areas where there is little room for grid expansion.

In August 2000, American Superconductor completed delivery of 29 kilometers of HTS wire to Pirelli Cables and Systems, the world's largest power cable manufacturer and a strategic alliance partner since 1990. Three 120-meter-long cables incorporating this wire are being installed in existing conduits beneath a Detroit Edison substation, replacing nine copper cables at the same power rating of 100 MW. This downtown substation is part of a grid serving 14,000 customers, including a General Motors Corporation plant and the Detroit Medical Center. The cable is scheduled to become operational in the fall of 2001.

Engineering and financial analyses are underway with several U.S. utilities for other cable demonstrations. We hope to sign a contract to supply wire for a new cable demonstration — most likely in the Eastern U.S. — this fiscal year. Additionally, Pirelli plans to demonstrate HTS cables with our wire in France and Italy in 2002, and has stated it expects commercial sales of HTS cables within the next few years.

The Bush Administration has called for the development of a national power grid strategy by December 2001. In 1999, the influential Electric Power Research Institute published its vision for a national grid based on a backbone of HTS cables. We believe that high capacity, direct current superconducting "electricity pipelines" can and will play a core role in a national grid.

## **REVIVING UP HTS MOTORS & GENERATORS**

Our Electric Motors and Generators business made excellent progress in its HTS motor development program this year. Last July this business achieved a key milestone of successfully operating a 1,000-horsepower (hp) HTS motor under our longstanding collaboration with Rockwell Automation, an operating unit of Rockwell International Corporation. This high efficiency motor was designed to operate at half the electrical losses of a conventional motor of the same power rating.

In parallel, we continue making significant investments in the design, development, testing and patenting of our proprietary ultra-compact, low-cost HTS motors. These ultra-compact

motors are more efficient and at least half the weight and size of conventional motors — resulting in manufacturing cost reductions of up to 40 percent over conventional, copper-wound motors. We made strong headway and are on track toward our goal of demonstrating an ultra-compact 5,000-hp motor in July 2001.

We believe the most significant near-term market for our ultra-compact HTS motors is electric ship propulsion systems. The annual market for ship propulsion motors is \$250 million today, and projected to grow to \$2–4 billion by 2010. Today all non-sail cruise ships and many cargo ships utilize electric motors for propulsion. Last year the U.S. Navy decided to transition to electric drives. Because of their smaller size and higher efficiency, HTS motors can provide significant advances in maneuverability, fuel efficiency, stealth, and cargo and passenger space.

Our Electric Motors and Generators business is focused on developing, manufacturing and selling ship propulsion motors. To date we have received several contracts from the U.S. Navy's Office of Naval Research (ONR) totaling \$6.4 million for the design and development of HTS motors for electric ship propulsion. We anticipate additional ONR contracts, leading to initial sea trials of an HTS propulsion system in 2003. We believe HTS ship propulsion motors will be a commercial product for us in three to four years.

To gain expertise in ship propulsion applications and channels to market, we enlisted ALSTOM Power Conversion, Inc., a world leader in the design, manufacture and sale of electric ship motors, as a subcontractor on our ONR contract for drive system design and propulsion system integration. We also entered into a non-exclusive collaboration with Litton Industries' Litton Ship Systems group, a leading shipbuilder, to accelerate the commercial launch of HTS ship propulsion technologies. Ultimately, we hope to provide Litton and other shipbuilders with an array of HTS systems and components that will be the basis for entirely new concepts in ship design — resulting in a paradigm shift on par with the transition from sail to steam.

With the objective of creating the fastest possible path to commercialization of HTS motors, we set a target of creating a jointly owned business with a motor manufacturer to leverage manufacturing capabilities and channels to market. We are engaged in in-depth discussions with several large industrial motor manufacturers, and plan to have a letter of intent signed by the end of the year.



We believe the second near-term market opportunity for our motors and generators is electric power generation. Innovations in motor technology are directly transferable to generators, which are basically motors run in reverse. The advantages of HTS generators are lower manufacturing costs and greater efficiency, which means power generators derive more electricity from every unit of fuel.

The annual market for generators with power ratings greater than 20 MW is \$2 billion and growing. We believe HTS generators will be available for commercial sale in the 2004 timeframe. In order to meet this commercialization target, we intend to demonstrate an HTS generator with a 2-4 MW power output by the end of the current fiscal year. We then plan to connect an HTS generator to the power grid in the summer of 2002. This will mark the first time an HTS generator is producing power for consumption by customers and will demonstrate critical features necessary for commercialization.

#### **EXTENSIVE PATENT ESTATE**

We expanded the size of our patent portfolio during the year to more than 370 patents pending and issued worldwide, greatly increasing the barriers to entry to the markets we address. We have also obtained more than 180 licenses to issued and pending patents owned by others that we believe could be useful in the commercialization of our products. We intend to continue aggressively pursuing patents and licenses.

#### **FINANCIAL RESULTS**

For the fiscal year ended March 31, 2001 revenues increased 11 percent to \$16.8 million from \$15.1 million for the prior year. The net loss for fiscal 2001 was \$21.7 million, or \$1.08 per share, versus a net loss of \$17.6 million, or \$1.11 per share, last year. Cash, cash equivalents and long-term investments totaled \$160.2 million as of March 31, 2001, versus \$218.7 million at the close of the previous fiscal year. Cash use during the year included planned investments of \$36 million in property, plant and equipment.

Planned investments for the current fiscal year total approximately \$60 million and are expected to reduce cash, cash equivalents and long-term investments to about \$100 million. More than half of this investment will be in property, plant and equipment, primarily for the HTS wire plant.

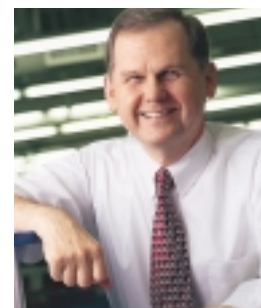
#### **INTEGRAL TECHNOLOGIES FOR 21<sup>ST</sup> CENTURY POWER**

Edison General Electric Company was founded in the 1880s, and became the General Electric Company in 1892. It was built on two fundamental technologies: wires and switches. The wires were made of copper and the switches were mechanical, on-off devices. These wires and switches were the basis for the generators, motors, power cables and distribution systems that companies like General Electric invented at the beginning of the 20<sup>th</sup> century.

Copper wire and mechanical switches were fine technologies for the last 100 years. But they won't meet all the new demands of the 21<sup>st</sup> century.

American Superconductor is a true "power technologies company," well positioned to meet 21<sup>st</sup> century power industry demands. Similar to the early days of Edison General Electric, our two fundamental products are wires and switches. Only today the wires are HTS wires, and the switches are high-speed solid-state power electronic devices called converters. These two products are fundamental to virtually all power technology solutions that will be built in the 21<sup>st</sup> century.

American Superconductor's great opportunity is to create and commercialize advanced power technologies based on these two core products. Together they define a new global power infrastructure as revolutionary in scope and impact as General Electric's products were in the last century. We're well on our way toward seizing this opportunity.



Sincerely,

A handwritten signature in black ink, appearing to read "Gregory J. Yurek". The signature is fluid and cursive, written over a white background.

Gregory J. Yurek  
President, Chief Executive Officer and Chairman  
June 15, 2001

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

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**FORM 10-K**

**FOR ANNUAL AND TRANSITION REPORTS  
PURSUANT TO SECTIONS 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

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

For the fiscal year ended March 31, 2001

OR

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

For the Transition Period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 0-19672

**American Superconductor Corporation**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or other jurisdiction  
of incorporation or organization)

**04-2959321**  
(IRS Employer  
Identification Number)

**Two Technology Drive**  
**Westborough, Massachusetts**  
(Address of Principal Executive Offices)

**01581**  
(Zip Code)

**Registrant's telephone number, including area code: (508) 836-4200**

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

**Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$.01 par value**

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 Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

On April 30, 2001, the aggregate market value of voting Common Stock held by nonaffiliates of the Registrant was \$307,722,964 based on the closing price of the Common Stock on the Nasdaq National Market on April 30, 2001.

The number of shares of Common Stock outstanding as of April 30, 2001 was 20,280,191.

**DOCUMENTS INCORPORATED BY REFERENCE**

**Document**

**Form 10-K Part**

Definitive Proxy Statement with respect to the Annual Meeting of Stockholders for the fiscal year ended March 31, 2001, to be filed with the Securities and Exchange Commission by June 27, 2001.

Part III

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. For this purpose, any statements contained herein that relate to future events or conditions, including without limitation, the statements under “Item 1. Business” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and located elsewhere herein regarding industry prospects and the Company’s prospective results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects,” and similar expressions are intended to identify forward-looking statements. Such forward-looking statements represent management’s current expectations and are inherently uncertain. The important factors discussed below under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Future Operating Results,” among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Any such forward-looking statements represent management’s estimates as of the date of this Annual Report on Form 10-K. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing the Company’s views as of any date subsequent to the date of this Annual Report on Form 10-K.

### **Item 1. *Business***

#### **Overview**

American Superconductor Corporation is a world leader in developing products using superconducting materials and power electronic switches. We offer two core enabling technologies and products: high temperature superconductor (HTS) wires and power electronic switches. We sell products based on these technologies to electrical equipment manufacturers, industrial power users, and businesses that produce and deliver power.

We develop and manufacture HTS wire capable today of carrying more than 140 times the electrical current of conventional copper wire of the same dimensions. We have also developed and commercialized advanced power electronic switches that control, modulate, and move large amounts of power with higher efficiency and at lower cost than competing products for power levels greater than 50 kilowatts (50kW).

Leveraging these core products is fundamental to our commercialization strategy and has resulted in two other significant products. We also manufacture and sell superconducting magnetic energy storage (SMES) systems, which are used by customers to improve power quality and reliability and increase power transfer capacity in constrained transmission grids. We are also developing lower cost, higher efficiency, smaller and lighter electric motors and generators.

Our products, and those sold by electrical equipment manufacturers incorporating our products, can:

- Dramatically increase the reliability and power transfer capacity (“bandwidth”) of power delivery systems;
- Substantially improve the quality of electric power delivered to customers;
- Greatly reduce the manufacturing and operating costs of primary electrical equipment, including generators and motors; and
- Conserve energy resources used to produce electricity, such as oil, gas and coal, by more efficiently conducting electricity and converting it into useful forms.

Consistent with bringing our revolutionary products to market on a global basis, we have established a number of strategic relationships with market leaders, including: Pirelli Cables and Systems; the GE Industrial Systems division of the General Electric Company; Rockwell Automation, an operating unit of Rockwell International Corporation; ALSTOM Power Conversion, Inc.; Litton Industries’ Litton Ship Systems group; and Electricité de France.

We believe there will be significant market demand for our products because of the following factors:

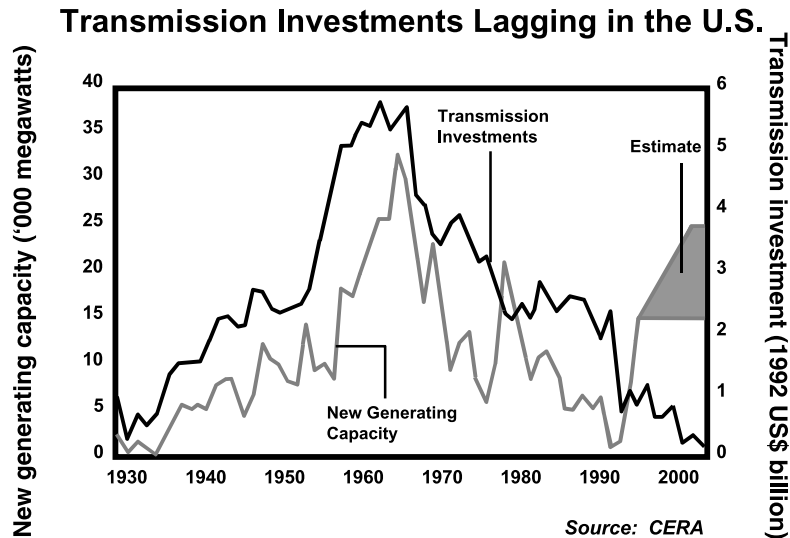
- Demand for electrical power is rapidly growing on a global basis;
- The power delivery infrastructure in many developed nations is severely constrained in its ability to safely carry and deliver large amounts of power;
- Power reliability and power quality are increasingly important as economies transition to computerized and digital electronic systems;
- Domestic policy is now acknowledging the need to upgrade the transmission and distribution grid as part of an effective long-term national energy policy; and
- Environmental threats from global industrialization and population growth continue to influence nations to encourage environmentally friendly power technologies.

## **Market Overview**

### *Power Demand and Transmission Capacity*

Over the next 10 years, domestic demand for electric power is expected to increase approximately 25%. This large projected increase is being driven in part by the trend toward electrification of energy use throughout the world. Rapid growth in the use of computers, the Internet and telecommunications products has created a significant increase in demand for power to run computers and other microprocessor-based components and devices that depend on electricity. Projected growth rates for power consumption by these newer technologies are far higher than for traditional uses of power, which have historically grown in proportion to the GNP. This growth in power consumption, especially for higher quality and more reliable power to support digital applications, is a major driver for all of our businesses.

We believe another major factor in our expected growth will be the need for massive improvements to the nation's transmission infrastructure. As identified in a report by President Bush's National Energy Policy Development Group (NEPDG), transmission capacity is already insufficient to meet today's needs. The graph below illustrates the decline in transmission asset investment over the last decade while generating capacity increased.



The NEPDG report signals an important shift in federal energy policy, including recognition of critical deficiencies in the national transmission grid and identification of specific initiatives favorable to our commercialization objectives.

Among other conclusions, the report specifically recommends that the President direct appropriate federal agencies to examine the benefits of establishing a national transmission grid to meet the energy needs of the growing U.S. economy. It further recommends that the Secretary of the U.S. Department of Energy (DOE) be directed to identify transmission bottlenecks and specific measures to remove such bottlenecks. The report specifically recommends that the President direct the DOE to expand research on transmission reliability and superconductivity. It also cites the need for incentives for adequate investment in the transmission system and formation of companies dedicated to transmission facility operation. We believe we are well positioned to benefit from expected future improvements in transmission capacity, reliability and efficiency consistent with the proposed national energy policy.

In the summer of 1999, failures of overloaded power cables in a number of U.S. cities indicated the need to upgrade the power delivery infrastructure to keep pace with increasing power demand. Several years ago, the Electric Power Research Institute estimated that 2,200 miles of U.S. urban power cables were candidates for replacement. We believe this figure has increased in recent years. We estimate that the annual addressable worldwide market for HTS power cables for both power transmission and distribution applications is \$5 billion.

*Power Quality and Reliability*

The reliability of the power supply network and the quality of the power delivered are becoming increasingly important in today's economy. Many of the new computer and telecommunications applications that are driving increased demand for power incorporate silicon chips that require a higher level of power reliability and quality. Voltage instability and low voltage in the power delivery network are significant problems for modern computers and telecommunications equipment. As the Internet economy grows, avoiding downtime due to power-related problems will become increasingly important. In addition, the increased use of sensitive electronics in manufacturing has led to more frequent and abrupt shutdowns of industrial operations because of voltage sags.

Protection against power quality problems such as voltage sags lasting two seconds or less can provide significant economic value to large industrial users of power. Such momentary sags cause more than 90% of all plant shutdowns, which can last from hours to days and be very costly. According to a Sandia National Laboratories study, the annual cost to U.S. businesses of power disturbances is \$150 billion, with \$114 billion or 76% resulting from voltage sags and undervoltages.

In the past, electric utilities have attempted to enhance the reliability of networks primarily by installing more power lines. Power suppliers are finding it increasingly difficult to get permits for new lines due to environmental, health, safety, property value and aesthetic concerns. As a result, both power users and electric utilities are seeking new solutions for power quality and reliability problems.

We believe we are well positioned to participate in the significant increases in investment in the grid that are expected to occur over the next decade and beyond. We anticipate that our participation in this growing opportunity will be through sales of SMES and related products, and through sales of HTS wires for high-capacity power cables that increase the power bandwidth of existing rights of way.

#### *Power Electronic Switches*

After power is generated or transported over wires, it nearly always requires switching to a more useful form specific to end-use applications. Driven in part by the trend toward a global digital economy, the complexity of switching power into useful forms is increasing. This in turn is driving the market for power switching applications. Industry experts estimate that more than 20% of all power generated in the U.S. goes through power electronic switches and that this amount will increase with higher demand for more reliable power, including distributed generation.

Frost & Sullivan estimates the annual worldwide alternating current (AC)/direct current (DC) switching power supply market at approximately \$9.4 billion, growing to about \$18.3 billion in 2005. AC/DC power supplies constitute the largest part of the power electronics market, and product sales have historically been concentrated in the information technology area. Power electronic switches are also widely used in the electric power, transportation, industrial, and defense sectors to condition and control power.

Key trends in power electronic switches applied to power infrastructure markets include greater modularization and standardization, demand for smaller units with higher power density, and ongoing consolidation of a fragmented market for power electronic switches.

#### *Motors and Generators*

The market for large electric motors and generators is well developed, with strong competitors and intense pricing pressure. We estimate that the annual worldwide market for commercial motors (machines with ratings of 1,000 horsepower (hp) or higher) is approximately \$1 billion, and that the worldwide market for electrical generators (with power ratings over 30 megawatts (MW)) is approximately \$2 billion per year. Large electric machine production today is labor intensive, requires a large fixed asset investment, and does not lend itself to mass production techniques. As a result, many large motor and generator manufacturers are seeking opportunities to reduce manufacturing and/or investment costs to improve profitability.

We believe an initial market penetration for HTS motors will be in transportation applications, particularly electric ship propulsion for cruise, cargo and naval vessels, where major size and weight savings can provide a key benefit by increasing design flexibility and operating profits. The annual market for ship propulsion motors and generators is expected to grow to \$2-4 billion in the next decade, from approximately \$400 million today.

### **Our Solutions**

Based on an intellectual property estate of more than 370 patents and patents pending, we are a world leader in two core technologies: HTS wires and power electronic switches. These enabling technologies are required to meet the needs of the 21st century power infrastructure. We sell some products, such as SMES systems, directly to end users, and sell other products through original equipment manufacturers, as in the case of power cables.



Our products are designed to be incorporated in a wide range of end products including electric power cables, industrial motors and generators, ship propulsion motors, distributed power applications such as microturbines, fuel cells and wind turbines, and uninterruptible power supply (UPS) systems.

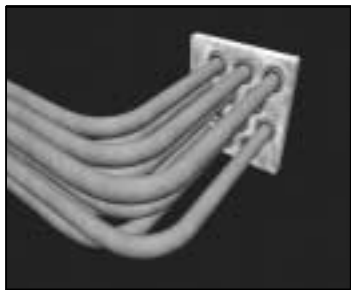
#### *HTS Wire for Power Transmission Cables*

One of our two core products is HTS wire. When cooled to -324° Fahrenheit, our HTS wire today carries more than 140 times the electrical current of copper wire of the same dimensions. We believe an important application for our HTS wire will be high-capacity power cables, which are the backbone of the power delivery infrastructure. The performance levels and mechanical properties of our HTS wire are sufficient today to meet the technical and commercial requirements for cables for urban power delivery systems.

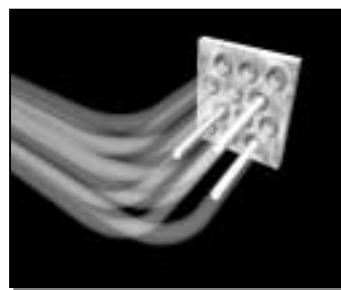
HTS cables can provide a variety of advantages over conventional copper cables. HTS cables can be installed in existing conduits, rather than building more conduits for traditional cables, which eliminates excavation costs and significantly reduces construction and engineering costs. Such costs typically account for up to 70% of total system costs for underground transmission projects in urban areas. In addition, replacing copper cables in existing power systems with HTS cables frees up underground cable conduits for other uses, such as telecommunications, high-speed Internet and cable television. We also believe that installation of HTS cables in existing urban conduits will allow the elimination of some substations within cities, improving system operation and potentially freeing up real estate for other uses. We believe that the advantages of HTS cables will also be very attractive to businesses that distribute power in suburban settings, many of which find it increasingly difficult to secure clearance for installation of new overhead power lines.

Because of the high power capacity of our HTS wire, underground power cables using our HTS wire will contain much less wire, yet will have the potential to carry up to five times more power than copper-wire cables of the same dimensions. We expect the first use of our HTS wire in power cables for a utility network to occur in the second half of 2001, when Pirelli and Detroit Edison energize three 120-meter HTS power cables in a downtown Detroit substation. These three superconducting cables are replacing nine copper-wire cables, and we believe this project will be an important demonstration of the commercial viability of HTS power cables. In August 2000, we completed delivery of approximately 29 kilometers of HTS wire, which Pirelli used to manufacture HTS power cables for the Detroit Edison demonstration project. Management expects that an announcement regarding the use of HTS power cables in the Detroit grid will occur by December 31, 2001, after the HTS cable system has been energized to serve 14,000 Detroit Edison customers.

### **Detroit Edison: Serving the Power Needs of 14,000 Customers in Downtown Detroit**



**Nine Existing  
Copper Cables  
Have Been Removed**



**Three HTS Cables  
Are Being Installed – Six  
Conduits Free for  
Expansion/Other Uses**

### *Superconducting Magnetic Energy Storage (SMES) Systems*

Our power quality and reliability solutions are based on proprietary power conversion electronics, HTS wire and superconducting electricity storage coils. Because the wire in a coil of superconducting material has no resistance to the passage of electrical current, large amounts of electricity can be stored in those coils and removed instantaneously. These features, made possible by integrating our proprietary superconducting storage devices and power electronic switches, provide the basis for a product line called superconducting magnetic energy storage, or SMES. We offer two SMES products:

- Power Quality SMES, known as PQ-SMES, addresses power quality problems faced by industrial users of electricity; and
- Distributed-SMES, known as D-SMES, addresses power reliability problems in power delivery networks.

The PQ-SMES system protects industrial power users from the adverse effects of momentary voltage drops. Similarly, D-SMES systems protect electric utilities by stabilizing voltage in power networks, by injecting large amounts of power from a storage coil and power electronic converters to restore the voltage to normal levels. Both SMES products provide solutions at very high power levels—typically 5MW and greater. Our SMES products use proprietary electromagnets made with low temperature superconducting (LTS) wire combined with proprietary power electronic switches. We have also incorporated HTS wire—rather than copper wire—into our SMES products to carry power in and out of the LTS storage coils, significantly reducing manufacturing and operating costs.

In 1997, we introduced PQ-SMES to provide “high nines” power—very high quality power—at industrial and commercial sites. Our key target customer for PQ-SMES is semiconductor manufacturers, which understand the impact of voltage sags on productivity and the resulting high cost of downtime. As of May 31, 2001, we had sold three PQ-SMES systems worldwide to semiconductor producers.

Introduced in 1999, D-SMES dramatically increases power grid reliability for utilities and power transmission companies by addressing dynamic voltage problems and increasing power flow through the grid. We had sold 11 D-SMES systems worldwide as of May 31, 2001.

D-SMES systems increase large-scale power flow through existing transmission assets, significantly improving grid power bandwidth. As noted in the “Market Overview” section, low levels of investment in U.S. transmission grids have contributed to a shortfall in network capacity. D-SMES is also a cost-effective and readily deployable solution. Given these factors and the current federal emphasis on increasing transmission capacity and reducing related regulatory hurdles, we anticipate future demand for D-SMES by utilities and transmission companies.

In April 2000, we formed a strategic marketing and sales alliance with GE Industrial Systems to bring co-branded D-SMES and PQ-SMES products to market. We believe that GE is a strong market channel for these products. Our first order as a result of this new alliance was received in September 2000 from Entergy Corporation, one of the largest U.S. utility companies. In May 2001, we and GE Industrial Systems announced a follow-on order from Entergy. We believe this follow-on order confirms that D-SMES has crossed an important market acceptance threshold in demonstrating its ability to increase power transfer cost effectively on large-scale utility transmission systems.

### *Power Electronic Switches*

Utilities have historically relied on slow electromechanical switches and passive devices, such as capacitors and tap changing transformers, to manage the power grid. However, digital age demand for better power reliability and quality calls for higher performance through faster switching devices and active grid management. Power electronic switches that control, modulate and move large amounts of power faster and with far less disruption than electromechanical switches are essential to active grid management. We have leading-edge expertise in this area based on our years of experience with power electronics applications for our SMES product

line, which incorporates both superconductor and advanced power electronic switch technologies. Together with HTS wires, our power electronic switches are a core technology.

In June 2000, we acquired the assets of Integrated Electronics, LLC (“IE”) of Milwaukee, Wisconsin, a manufacturer of power electronic switches utilizing state-of-the-art power semiconductors. IE had been one of our co-developers and suppliers of advanced power electronic switch modules for use in our SMES product line. The power electronic switches used in our SMES product line convert electrical energy stored in superconducting electromagnets in the form of DC power into controlled AC power. This type of power electronic switch is called an inverter. Over the past year, IE has been integrated into our company. Our product development and marketing efforts are now focused on expanding the customer base beyond our existing business units.

In October 2000, we announced the launch of the PowerModule™ line of power converters as a merchant product—that is, for sale to customers other than our SMES business. Target markets for our power electronic switches include distributed generation equipment such as fuel cells and microturbines, other power quality devices such as flywheels and batteries, and electronic motor drives for transportation systems such as locomotives, ships, and electric or hybrid electric vehicles, all focused on power levels of 50kW or higher. We plan to expand our power electronics technology base and develop new products for other market segments where power technologies are important. With our highly differentiable power electronic switch product, we believe we have an opportunity to develop a leadership position in the marketplace for advanced power electronics in the higher power range.

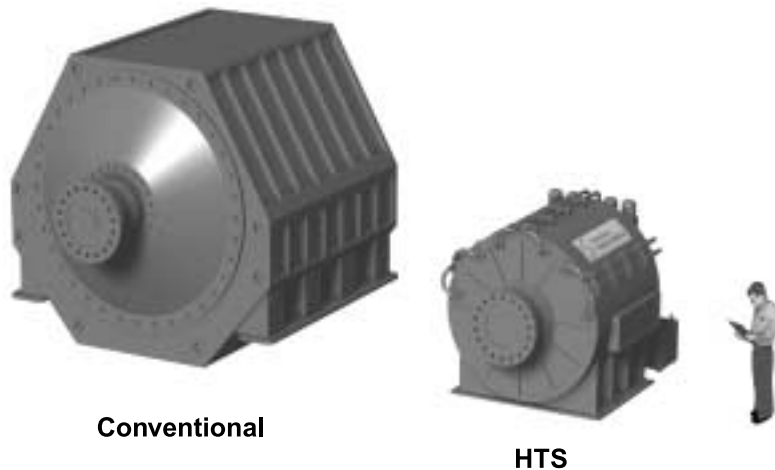
We believe our power conversion technology is more advanced than our competitors’ in the areas of power density, standardization and programmability. Additionally, our technology allows customers to protect proprietary control algorithms unique to their businesses by placing a firewall between programming functions accessible to customers, and programming functions accessible to us. Our approach to protecting customers’ intellectual property is believed important because it allows for more product standardization while simultaneously providing customers more flexibility in the design, application, and modification of their proprietary application control strategies. Derivative benefits are expected to be shorter product development cycle time, lower manufacturing costs, and improved quality control.

We received two non-SMES orders for PowerModules in March 2001. One is for a wind turbine application and the other is for a battery-backed UPS system.

### *HTS Electric Motors and Generators*

Superconducting motors and generators are new types of rotating machines that employ HTS windings in place of conventional copper coils. Because HTS wire can carry larger currents than copper wire, these windings are capable of generating significantly more powerful magnetic fields in a given volume. Utilizing our 11 years of design and development experience in the area of HTS rotating machines, we have created proprietary designs for HTS motors and generators that we expect will greatly reduce the cost of manufacturing this equipment. Advances in coil design make it possible for superconducting motors and generators to match the power output of equally rated conventional machines with as little as one-fifth the size and weight. The smaller size and compact nature of superconducting machines allows them to be manufactured at lower cost than equivalent conventional motors and generators.

### **Ship Propulsion Motors - Ultra-compact HTS Motors are 30% of the Size of Conventional Motors**



We believe a primary initial use for HTS motors will be in transportation applications, particularly naval and commercial ship electric propulsion, where critical size and weight savings can increase ship design flexibility. Electric drives have already penetrated the cruise ship segment because of advantages over competing mechanical systems. The increased power density, higher operating efficiency and inherent quietness of HTS-based marine propulsion systems will significantly expand the advantages of electric propulsion systems.

In June 1999, we were awarded a contract by the U.S. Navy's Office of Naval Research (ONR) for the preliminary design of a 25 MW (33,500-hp) HTS motor for ship propulsion. In January 2000, the U.S. Navy announced that it is targeting electric drives for all future propulsion systems in its warships. Follow-on design and development contracts were awarded to us by ONR in October 2000 and April 2001.

ALSTOM Power Conversion, Inc., a world leader in the design, manufacture and deployment of electric motors for ship propulsion, is working as a subcontractor to us on the U.S. Navy program. Initial sea trials of an HTS motor are expected to commence by December 31, 2003.

In July 2000, we successfully demonstrated operation of the world's first 1,000-hp HTS motor in collaboration with Rockwell Automation Power Systems. This high-efficiency motor was designed to operate at half the electrical losses of a conventional motor of the same power rating.

We are building an ultra-compact 5,000-hp HTS motor that we plan to test by the end of July 2001. As of March 31, 2001, we had built and tested all of the HTS components and many subsystems for this motor, including new power electronics for controlling the motor, powering the HTS windings and monitoring performance.



We plan to build and test an HTS generator by March 31, 2002. The developments we achieved in HTS motor technology apply to generators as well, which are basically motors run in reverse.

We have a separate business unit focused on developing and commercializing HTS motor and generator technology. We intend to team with one or more established motor and generator manufacturers to form a jointly owned business for manufacturing and marketing HTS motors and generators to accelerate commercialization of this technology. If we are successful in establishing that jointly owned business, we intend to sell HTS components and systems to that business.

### *Cooling Systems*

We are designing and fabricating cooling systems to support our superconducting products, which will operate only if the wire or coils are cooled below their critical temperature. Our HTS materials, which maintain their superconductivity at higher temperatures than LTS materials, are cooled with liquid nitrogen or with special refrigerators known as cryocoolers. In particular, the HTS wire used to manufacture HTS power cables is typically cooled by flowing liquid nitrogen, a non-toxic liquid, through the hollow core of the cables. In contrast to oil, which is typically used to dissipate the heat generated by running an electrical current through copper wires or is used as an electrical insulating medium in some cables and most large transformers, the liquid nitrogen used to cool our HTS wire is non-flammable and presents fewer environmental hazards than those associated with the use of oil. Liquid nitrogen is also significantly less expensive than oil.

Our LTS materials require cooling to lower temperatures than HTS materials. Liquid helium combined with cryogenic, or very low temperature, refrigerators is used to cool the magnetic coils in our SMES products.

### **Strategic Relationships, Research Arrangements and Government Contracts**

We have a number of strategic relationships, research arrangements and government contracts. Our most significant strategic corporate agreements are with Pirelli, GE Industrial Systems (“GE”), Electricité de France (“EDF”), ALSTOM Power Conversion, Inc., and Litton Ship Systems. We believe strategic relationships, research arrangements and government contracts provide the following important benefits:

- Several of our strategic partners will be critical in developing and demonstrating commercial applications for our HTS and SMES products;
- Several of these relationships, particularly those with Pirelli and GE, provide a potentially large channel to market;
- Various parties to these arrangements provide us with critical funding. From inception through March 31, 2001, we received approximately \$65 million of funding under research and development contracts. Approximately 67% of this funding came from the private sector, with the balance from government agencies;
- They provide us with development and marketing rights to important technologies; and
- They assist us in meeting benchmarks.

The Pirelli alliance was originally established in February 1990 and has encompassed a series of different agreements intended to combine Pirelli’s cable technology, manufacturing and marketing expertise with our proprietary wire-manufacturing technologies for the purpose of developing and producing HTS wire for cables. The Pirelli agreements contain provisions governing the manufacture, sale and use of our HTS cable wire in cables used to transmit both electric power and control signals. In general, Pirelli is obligated to buy this HTS wire exclusively from us or to pay us royalties for any of the wire it manufactures, and we are obligated to sell this cable wire exclusively to Pirelli, for use in these applications anywhere in the world other than Japan. We have exclusive manufacturing rights for this wire in North America for these applications, and Pirelli may obtain manufacturing rights in Europe and other parts of the world, subject to the payment of royalties to us. Through March 31, 2001, Pirelli had provided us with a cumulative total of \$21.6 million in development funding,

including \$5.5 million from the most recent development contract dated December 15, 1999, under which Pirelli has agreed to provide us with up to \$13.8 million in additional funding over the five-year period from October 1, 1999 through September 30, 2004. Portions of this contract are subject to cancellation provisions. The latest agreement focuses on development of second-generation HTS wire as well as further improvements to our currently available HTS wire.

In April 2000, we entered into a marketing and sales alliance with GE Industrial Systems giving GE the exclusive right to offer our D-SMES product line to U.S. utilities and the right to sell PQ-SMES systems to certain of its global industrial accounts. Last April, we and GE introduced a co-branded SMES product offering.

The EDF relationship was established in April 1997. It involves:

- Exchange of information relating to developments in HTS technology and related fields and trends in the electricity industry; and
- Review of technical, industrial and commercial topics through an advisory board comprising representatives from both parties.

As part of the EDF alliance, in 1997 a subsidiary of EDF purchased 1.0 million shares of our common stock for \$10.0 million. EDF's subsidiary currently owns 1.15 million shares of common stock, representing approximately 5.7% of our outstanding common stock.

During fiscal 2001, we formed two additional strategic relationships we believe will be important to the development and commercialization of HTS shipboard propulsion motors.

We selected ALSTOM Power Conversion, a business of ALSTOM, as a subcontractor on our U.S. Navy contract. ALSTOM Power Conversion is a market leader in the design and manufacture of electric ship propulsion systems. The parent company, ALSTOM, based in Paris, is a global leader in electric power generation, electric motors and electric power systems.

We also formed a strategic alliance with Litton Ship Systems, a business unit of Litton Industries and one of the nation's leading shipbuilders. The purpose of this alliance is to collaborate on the use of HTS technology for commercial and naval ships.

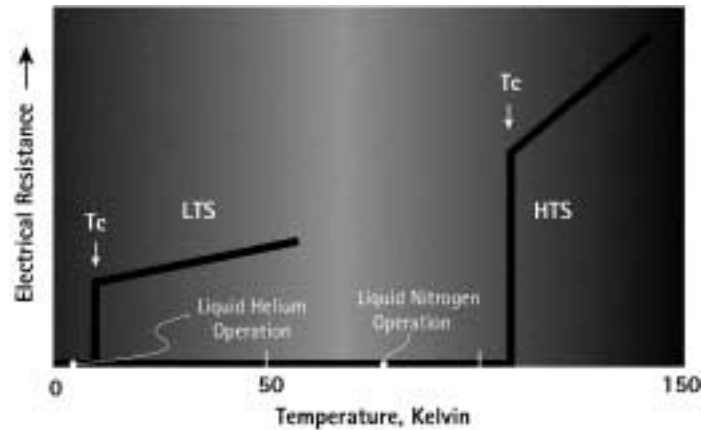
We have also established a number of collaborative research relationships with organizations such as Industrial Research, Ltd. in New Zealand, several U.S. Department of Energy laboratories, the University of Wisconsin Applied Superconductivity Center, MIT and EPRI. We are also party to a number of government contracts, with entities such as Wright-Patterson Air Force Base and the U.S. Department of Energy, relating to the development and supply of prototype products.

## **Superconductivity**

A superconductor is a perfect conductor of electricity. It carries direct current with 100% efficiency because no energy is dissipated by resistive heating. Direct current in a superconducting loop can flow undiminished forever. Superconductors can also conduct alternating current but with some slight loss of energy.

Superconducting materials lose all resistance to the flow of direct electrical current and nearly all resistance to the flow of alternating electrical current when they are cooled below a critical temperature. The critical temperature is different for each superconducting material. Superconducting materials known today, including both HTS materials and LTS materials, need to be cooled to very low temperatures to act as superconductors.

The graph below illustrates the complete loss of resistance to the flow of electricity through wire of an LTS material (niobium-titanium alloy) and an HTS material (bismuth-based, copper oxide ceramic) at their critical temperature. The HTS material in this chart has no electrical resistance below 108 Kelvin (-265 degrees Fahrenheit). The LTS material in this chart has no electrical resistance below 10 Kelvin (-441 degrees Fahrenheit).



A combination of three conditions must be met for a material to exhibit superconducting behavior:

- The material must be cooled below its critical temperature ( $T_c$ );
- The current passing through a cross-section of the material must be below a level known as the critical current density ( $J_c$ ); and
- The magnetic field to which the material is exposed must be below a value known as the critical magnetic field ( $H$ ).

The initial discovery of superconducting materials was made in 1911. Before 1986, no known superconductor had a critical temperature above 23 Kelvin. Zero Kelvin is the absolute zero of temperature, and is the equivalent of -459 degrees Fahrenheit; 23 Kelvin is the equivalent of -418 degrees Fahrenheit. Although it is possible to cool LTS materials to their critical temperature, that cooling process is expensive and often difficult, which limits the commercial applications of LTS technology.

In 1986, a breakthrough in superconductivity occurred when two scientists, Dr. K. Alex Müller and Dr. J. Georg Bednorz, at an IBM laboratory in Zurich, Switzerland, identified a ceramic oxide compound, an HTS material, which was shown to be superconductive at 36 Kelvin (-395 degrees Fahrenheit). This discovery earned them the Nobel Prize for Physics in 1987, which is one of the four Nobel Prizes that have been awarded for work on superconductivity. A series of related ceramic oxide compounds that have higher critical temperatures have been subsequently discovered. Some of these materials are being actively used throughout the world and by us for practical wire applications. During the same period, a variety of organic materials have been discovered, in a class called “fullerenes,” with critical temperatures intermediate between the high temperature ceramic oxides and low temperature metallic superconductors. Because of the expense and complexity of synthesizing the fullerenes and also their limited performance in a magnetic field, these have generally not been actively considered for wire applications.

In early 2001, it was discovered that a well-known and widely available material,  $MgB_2$ , has a superconducting transition temperature at 40 Kelvin (-377 degrees Fahrenheit). Because of its potential low cost and ease of synthesis, work has been initiated around the world to investigate its potential for wire application. We have also initiated work on  $MgB_2$  as a potential wire material, both within the company and under outside contract. If its performance in magnetic fields could be further improved in spite of its relatively low transition temperature, it could find long-term application in areas such as motor coils operation at 30 Kelvin. We believe our expertise in composite wire fabrication methods will help enable us to develop a wire process for  $MgB_2$ .

## Status of Our HTS Wire Development

We have been successful in developing and producing HTS wire with performance levels sufficient to meet the technical needs for applications such as cables for urban power transmission systems and motors with power ratings of over 5,000 hp. We believe the electrical and mechanical properties of this wire, including its ability to withstand forces of tension, compression and bending during device manufacturing and operation, are adequate for present applications.

Although we have made rapid progress recently in improving performance levels of our HTS wire, commercial viability of applications must be established through demonstrations. We will also need to:

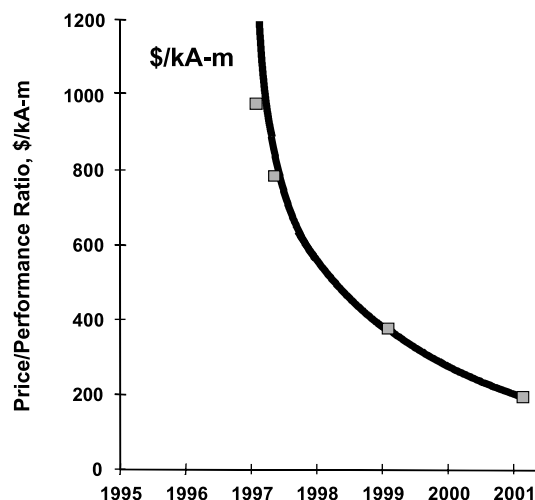
- Successfully address the engineering challenges of applying our manufacturing techniques to the production of HTS wires in greater quantities;
- Increase manufacturing capacity for HTS wire; and
- Reduce the manufacturing costs for our HTS wire.

## HTS Wire Production Techniques

We produce HTS wire by a variety of techniques. Our principal technique involves deformation processing, which is in some respects closely analogous to the technique used in the existing metal wire industry. In this approach, a metal tube, typically silver, is packed with an oxide precursor powder and sealed. The tube is then deformed into a wire shape by a variety of deformation processing techniques such as extrusion, wire-drawing, multifilamentary bundling, and rolling. Finally, the wire is heat-treated to transform the precursor powder inside the wire into a high-temperature superconductor. We consider the resulting composite structure, in this case consisting of many fine superconducting filaments embedded in a metal matrix, to be one preferred method of achieving flexibility and durability in our wire and wire products. The composite structure is the subject of a patent owned by MIT, based on an invention by Dr. Gregory Yurek, our Chairman of the Board, President and Chief Executive Officer and a founder, and a former professor at MIT, and Dr. John Vander Sande, a professor at MIT, a founder, and a member of our Board of Directors. This patent is licensed to us on an exclusive basis until 2011. Our wire production techniques could also apply to brittle  $MgB_2$ .

In the past few years, we have made significant progress improving the wire price performance ratio of our HTS wire. The following graph shows these price performance ratio improvements, as measured by the price per meter of wire divided by the electric current it carries as measured in kilo-amperes.

## Price/Performance Ratio: First Generation





During fiscal 2001, we improved first-generation HTS wire performance by 40%. We are currently quoting a price/performance ratio for volume sales one-third below that of a year ago. This price/performance ratio decreased due to lower manufacturing costs and higher performance. We also recently introduced other new features to enhance the performance of our multifilamentary composite wire. For example, we have added oxide particles to the silver metal to enhance its strength. We also laminate thin layers of stainless steel or other metal on the faces of the HTS tape-shaped wire, which further strengthens and protects the wire.

Within the past few years, very high levels of current carrying performance have been reported in small laboratory samples of HTS coated conductor wire by a variety of laboratories, including our own. Coated conductor wire, also referred to as second-generation wire, is made of a thick film of HTS material deposited on a flexible base, typically with a buffer layer in between. We have studied several HTS coated conductor processes and believe that some of these processes have the potential for use in manufacturing the next generation of HTS wire with high current-carrying capacity and lower cost than multifilamentary composite wire. We are pursuing the development of these processes with a significant internal program currently accounting for 80% of our materials research and development expenditures. We are also collaborating with Oak Ridge National Laboratory, MIT, Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, and other organizations in the research and development of this technology. We have fabricated coated conductor wire samples at high-performance levels. However, these have been short lengths of wire, to date, and there can be no assurance that we will succeed in developing this technology for commercial use. Commercial development of second-generation wire is targeted for 2005-2006.

## **Manufacturing**

We produce our HTS wire at our 102,000 square-foot Westborough, Massachusetts, headquarters facility, where we currently manufacture HTS wire at the rate of 500 kilometers per year. In Westborough, we have implemented statistical process control techniques and have defined manufacturing procedures for low-cost, reliable manufacturing operations.

In August 2000, we began construction of a 355,000-square foot facility at the Devens Commerce Center in Devens, Massachusetts. We expect to partially occupy the building and begin to install and test new manufacturing equipment in the summer of 2001. Full production is expected to begin in early 2002. We plan to use this new facility to expand our HTS wire production to meet our goal of producing thousands of kilometers of HTS wire per year to meet expected demand for applications such as power transmission cables, motors and generators.

We manufacture our commercial SMES systems at our 60,000-square-foot manufacturing facility in Middleton, Wisconsin. We assemble our SMES systems by combining components purchased from other parties with our proprietary LTS and HTS components, which we manufacture ourselves. We have developed manufacturing infrastructure including discrete work centers to support our current production, assembly and testing capacity of 48 SMES systems per year.

We obtain our power electronic switches from a contract manufacturer who assembles our proprietary design exclusively for us. We maintain a prototype assembly capability in-house that also can serve as a back-up manufacturing source.

## **Sales and Marketing**

We plan to sell our HTS wire and wire products through both a direct sales force and through marketing and distribution alliances with third parties. We are building a direct sales organization that can effectively demonstrate the advantages of our products over both more traditional products and competitive superconducting products.

We expect to leverage the technical knowledge of our sales force with the strengths of our strategic alliance partners in understanding customer needs and creating market demand for new electrical products based on our HTS and SMES products. These partners include:

- Pirelli, the world's largest producer of power cables;
- GE Industrial Systems, a global leader in manufacturing products used to distribute, protect and control electrical power and equipment;
- Rockwell, a leading manufacturer of large industrial motors;
- EDF, one of the world's largest electric utilities;
- ALSTOM Power Conversion, a market leader in the design and manufacture of electric ship propulsion systems; and
- Litton Ship Systems, one of the nation's leading shipbuilders.

We also expect to enter into arrangements with other third parties for the marketing and distribution of our HTS products, including arrangements with original equipment manufacturers, commonly known as OEMs, in which our products—particularly coils of HTS wire—are included as a component of a larger product such as a motor or generator.

We are developing several sales and distribution channels for our SMES products, including a direct sales organization, distributors and OEMs. We have distribution agreements with utility companies in Europe and South Africa. With GE, we are marketing a co-branded SMES product offering. We are also developing several sales and distribution channels for power electronic switch products, including a direct sales organization, distributors and OEMs.

We have added experienced transmission network planners to provide marketing and sales support for our D-SMES product. These individuals, who are experienced in the analysis and design of transmission and distribution networks, will help prospective customers to develop familiarity with our new technology and to assess the beneficial impact D-SMES can provide in the operation of their network systems. We plan to continue to build system planning expertise and to add a portfolio of value-added services for our utility customers.

## **Competition**

As we begin to market and sell our superconducting products, we will face intense competition both from vendors of traditional products and from competitors in the superconductor field. There are a number of companies in the U.S., Europe, Japan and Australia engaged in the development of HTS products. For HTS wire, our principal competitors presently include:

- Several Japanese companies, such as Sumitomo Electric Industries, Hitachi, Furukawa Electric Co. and Fujikura;
- Several European companies, such as Vacuumschmelze GmbH and Trithor in Germany, Nordic Superconductor Technologies in Denmark, Nexans in France, and Oxford Instruments in England; and
- Several companies in the U.S., such as 3M, Intermagnetics General and EURUS Technologies.

We do not know of any companies currently selling low-temperature SMES products that compete with our SMES products. However, there is a government-sponsored program in Japan to develop SMES systems for power quality applications. ACCEL Instruments GmbH in Germany is also exploring this technology. Our SMES products also compete against:

- Static VAR compensators (SVC) and static compensator (STATCOM) devices produced by Siemens, ABB and Mitsubishi Electric;
- Dynamic voltage restorers produced by companies such as Siemens and ABB;
- A high power, battery-based power electronics solution provided by S&C Electric;

- Flywheels offered by various companies around the world; and
- Battery-based UPS systems, which are widely manufactured and used around the world.

We believe our PowerModules, which are programmable for many different applications, have a higher power density and a lower cost of manufacturing than power electronic switches made by others. Competitors for our PowerModules include Ecostar, Inverpower, SatCon, Semikron and Trace, which is part of Xantrex.

Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we do. In addition, as the HTS market and the power quality and reliability market develop, other large industrial companies may enter these fields and compete with us.

## **Patents, Licenses and Trade Secrets**

### *HTS Patent Background*

Since the discovery of high temperature superconductors in 1986, the HTS industry has been characterized by rapid technical advances, which in turn have resulted in a large number of patents—including overlapping patents—relating to superconductivity being applied for and granted worldwide. As a result, the patent situation in the field of HTS technology and products is unusually complex.

An important part of our business strategy is to develop a strong patent position in all our technology areas. Our patent portfolio comprises both patents we own and patents we license from others. We devote substantial resources to building a strong patent position and we believe that we have significantly strengthened our position in the past several years. As of March 31, 2001, we owned (either alone or jointly) over 75 U.S. patents—as compared to over 55 as of March 31, 2000—and had over 100 U.S. patent applications (jointly or solely owned) on file. We also held licenses from third parties covering over 60 issued U.S. patents and over 15 U.S. patent applications. Together with the international counterparts of each of these patents, patent applications and licenses, we own more than 370 patents and patent applications worldwide, and have rights through exclusive and non-exclusive licenses to more than 180 additional patents and patent applications. We believe that our current patent position, together with our expected ability to obtain licenses from other parties to the extent necessary, will provide us with sufficient proprietary rights to develop and sell our products. However, for the reasons described below, there can be no assurance that this will be the case.

Despite the strength of our patent position, a number of U.S. and foreign patents and patent applications of third parties relate to our current products, to products we are currently developing, or to technology we are now using in the development or production of our products. We may need to acquire licenses to those patents, or to successfully contest the scope or validity of those patents, or to design around patented processes or applications.

If companies holding patents or patent applications that we need to license are competitors of ours, we believe the strength of our patent portfolio will significantly improve our ability to enter into license or cross-license arrangements with these companies. However, there can be no assurance that we will be able to obtain all necessary licenses from competitors on commercially reasonable terms, or at all.

We may be required to obtain licenses to some patents and patent applications held by companies or other institutions, such as national laboratories or universities, not directly competing with us. Those organizations may not be interested in cross-licensing or, if willing to grant licenses, may charge unreasonable royalties. We have successfully obtained licenses from a number of such organizations, including Lucent Technologies, Superlink of New Zealand, Oak Ridge National Laboratories, MIT, and Lawrence Berkeley Laboratories, with royalties we consider reasonable. Based on our past experience, we are optimistic that we will be able to obtain any other necessary licenses on commercially reasonable terms. However, there can be no assurance that we will be able to do so.

Failure to obtain all necessary licenses upon reasonable terms could significantly reduce the scope of our business and have a material adverse effect on our results of operations. We do not now know the likelihood of successfully contesting the scope or validity of patents held by others. In any event, we could incur substantial costs in challenging the patents of other companies. Moreover, the nature of HTS patents is such that third parties are likely to challenge some of our patents or patent applications, and we could incur substantial costs in defending the scope and validity of our own patents or patent applications whether or not a challenge is ultimately successful.

The sections that follow give more detailed information on the different areas related to designing and manufacturing superconducting products:

- The choice of materials used to make HTS products;
- The wire processing methods to be applied to those materials and the wire architecture;
- The components or subsystems to be fabricated and the fabrication methods to be used; and
- SMES systems and power electronic switches.

#### *Choice of HTS Materials*

At any given time, we will have a preference for using one or a few specific HTS materials in the production of our products. Any HTS material we use is likely to be covered by one or more patents or patent applications held by other parties.

We have obtained licenses to patents and patent applications covering some HTS materials, including an exclusive license from Superlink and a non-exclusive license from Lucent Technologies. However, we may have to obtain additional licenses to HTS materials.

#### *HTS Wire Processing and Wire Architecture*

We are concentrating on two main methods for processing HTS materials into wire. One produces multifilamentary composite wire, and the other produces a coated conductor wire architecture. Our strategy is to obtain a proprietary position in each of these methodologies through a combination of patents, licenses and proprietary know-how. If alternative processes become more promising in the future, we will also seek to develop a proprietary position in these alternative processes.

We have filed a number of patent applications that are applicable to multifilamentary and coated conductor wire architecture. Some of these applications have been issued as patents in the United States and abroad, while others are pending. We have acquired an exclusive license from MIT and a non-exclusive license from Oak Ridge National Laboratories to intellectual property relating to coated conductors, and a non-exclusive license from Lucent Technologies relating to the production of multifilamentary composite wire. We also have acquired certain intellectual property rights in the coated conductor area through our collaboration with EPRI.

We have an exclusive license from MIT under an issued U.S. patent that covers the architecture of multifilamentary composite wire, specifically the composite of HTS ceramics and noble metals such as silver. We have also filed for patents on laminate structures for this wire and on new architectures for coated conductor wire.

A number of other companies have also filed patent applications, and in some instances these have become issued patents, on various aspects of wire processing and wire architecture. To the extent that any of these issued or pending patents might cover the wire processing methodologies or wire architectures we use, we may be required to obtain licenses under those patents; however, there is no assurance that we will be able to do so.



### *HTS Component and Subsystem Fabrication Patents; HTS Application Patents*

We have received several patents and filed a significant number of additional patent applications regarding:

- The design and fabrication of electromagnetic coils and electromagnets;
- The integration of these products with an appropriate coolant or cryocooler;
- The application of these products to specific end uses; and
- HTS motor and generator designs.

Since the HTS motor and generator field is relatively new, we believe we are building a particularly strong patent position in this area. A number of other companies have also filed, and in some instances have received, patents on various applications of HTS wire and component and subsystem fabrication methods. If any existing or future patents cover any of these aspects of our operations, we may be required to obtain licenses under those patents.

### *SMES Systems and Power Electronic Switches*

We have received several patents and filed a significant number of additional patent applications on power quality and reliability systems, including the distributed SMES concept. We have acquired a non-exclusive license from Argonne National Laboratory on a cryogenic connector for SMES applications. We believe we have a strong patent position in the SMES area and are studying whether any third party patents apply to our technology. We have also filed a series of patent applications on our proprietary power electronic switches.

### *Trade Secrets*

Some of the important technology used in our operations and products is not covered by any patent or patent application owned by or licensed to us. However, we take steps to maintain the confidentiality of this technology by requiring all employees and all consultants to sign confidentiality agreements and limiting access to confidential information. However, no assurance can be given that these measures will prevent the unauthorized disclosure or use of that information. In addition, there is no assurance that others, including our competitors, will not independently develop the same or comparable technology.

### **Employees**

As of March 31, 2001, we employed a total of 404 persons, 39 of whom have Ph.D.'s in material science, physics or related fields. None of our employees are represented by a labor union. We believe that our employee relations are good.

### **Item 2. Properties**

Our headquarters are located in approximately 102,000 square feet of space in Westborough, Massachusetts under a lease that expires on May 31, 2003. We have an option to extend the lease for an additional five-year term. Additionally, we occupy approximately 60,000 square feet of space in Middleton, Wisconsin and approximately 30,000 square feet at a separate facility in Westborough, Massachusetts. We occupy the Middleton facilities under two leases that expire on December 31, 2003. The additional Westborough facility is occupied under a lease that expires in September 2005. In August 2000, we began construction of a 355,000 square foot facility for HTS wire manufacturing at the Devens Commerce Center in Devens, Massachusetts. We expect to partially occupy the building and begin training new employees in the summer of 2001.

Our power electronics business is currently operated out of 14,500 square feet of leased space in two buildings in Milwaukee. In March 2001, construction began on a new 50,000-square-foot leased facility near Milwaukee to house our growing power electronics business. We expect to consolidate our power electronics business in this new facility by the end of 2001.

**Item 3. *Legal Proceedings***

We are not involved in any legal proceedings other than routine litigation incidental to our business which we do not consider material.

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

No matters were submitted to a vote of the Company's security-holders during the fourth quarter of the fiscal year ended March 31, 2001.

## MANAGEMENT

The tables and biographical summaries set forth below contain certain information with respect to our executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Gregory J. Yurek . . . . .	54	President, Chief Executive Officer and Chairman of the Board of Directors
Roland E. Lefebvre . . . . .	51	Executive Vice President and Chief Operating Officer
Alexis P. Malozemoff . . . . .	57	Senior Vice President and Chief Technical Officer
Stanley D. Piekos . . . . .	53	Senior Vice President, Corporate Development, Chief Financial Officer, and Secretary
Thomas M. Rosa . . . . .	48	Chief Accounting Officer, Corporate Controller and Assistant Secretary

*Gregory J. Yurek* co-founded American Superconductor in 1987 and has been President since March 1989, Chief Executive Officer since December 1989 and Chairman of the Board of Directors since October 1991. Dr. Yurek also served as Vice President and Chief Technical Officer from August 1988 until March 1989 and as Chief Operating Officer from March 1989 until December 1989. Prior to joining American Superconductor, Dr. Yurek was a Professor of Materials Science and Engineering at MIT for 13 years. Dr. Yurek has been a director of American Superconductor since 1987.

*Roland E. Lefebvre* joined American Superconductor in May 1996 as our Vice President, Sales and Marketing and was elected our Executive Vice President and Chief Operating Officer in May 1998. Prior to joining American Superconductor, Mr. Lefebvre spent 23 years at General Electric Company in a variety of positions, most recently as General Manager, National Account Sales.

*Alexis P. Malozemoff* joined American Superconductor as our Vice President, Research and Development in January 1991 and was elected our Chief Technical Officer in January 1993 and Senior Vice President in May 1998. Prior to joining American Superconductor, Dr. Malozemoff spent 19 years at IBM in a variety of research and management positions, most recently as IBM Research Coordinator for High Temperature Superconductivity.

*Stanley D. Piekos* joined American Superconductor in February 1998 as our Chief Financial Officer, Vice President, Corporate Development, and Secretary, and was elected Senior Vice President in July 2000. From June 1994 until February 1998, Mr. Piekos served as Vice President and Chief Financial Officer of Brooks Automation, Inc., a supplier of robotics and controls to the semiconductor production equipment industry. For the nine years prior to June 1994, Mr. Piekos was employed by Helix Technology Corporation, a manufacturer of cryogenic equipment, most recently as Vice President and Chief Financial Officer. During his first fifteen years in business, Mr. Piekos held a variety of positions in financial management and marketing with W.R. Grace & Co., a global manufacturer of specialty chemicals and industrial equipment.

*Thomas M. Rosa* joined American Superconductor in October 1992 as our Corporate Controller and was elected our Chief Accounting Officer and Assistant Secretary in July 1998. Prior to joining American Superconductor, Mr. Rosa spent 10 years in a variety of financial management positions at Prime Computer, Wang Laboratories and Lockheed Sanders, most recently as Division Controller at Prime Computer.

## PART II

### Item 5. *Market for Registrant's Common Stock and Related Stockholder Matters*

The Company's Common Stock has been quoted on the Nasdaq National Market under the symbol "AMSC" since 1991. The following table sets forth the high and low price per share of the Company's Common Stock as reported on the Nasdaq National Market for the two most recent fiscal years:

	Common Stock Price	
	High	Low
<b>Fiscal year ended March 31, 2000:</b>		
First quarter . . . . .	15 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>
Second quarter . . . . .	16 <sup>3</sup> / <sub>4</sub>	11 <sup>13</sup> / <sub>16</sub>
Third quarter . . . . .	28 <sup>7</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>2</sub>
Fourth quarter . . . . .	75 <sup>1</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>16</sub>
<b>Fiscal year ended March 31, 2001:</b>		
First quarter . . . . .	51	19 <sup>5</sup> / <sub>8</sub>
Second quarter . . . . .	61 <sup>7</sup> / <sub>8</sub>	30 <sup>3</sup> / <sub>8</sub>
Third quarter . . . . .	55 <sup>15</sup> / <sub>16</sub>	22 <sup>1</sup> / <sub>2</sub>
Fourth quarter . . . . .	34 <sup>7</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>4</sub>

The number of shareholders of record on June 8, 2001 was 595.

### Item 6. *Selected Financial Data*

The selected consolidated financial data presented below for the fiscal years ended March 31, 2001, 2000, 1999 and 1998 have been derived from the Company's consolidated financial statements that have been audited by PricewaterhouseCoopers LLP, independent accountants. The financial data for the fiscal year ended March 31, 1997 have been derived from the combination of the Company's consolidated financial statements that have been audited by PricewaterhouseCoopers LLP, independent accountants, and the Superconductivity, Inc. ("SI") financial statements that have been audited by other independent accountants. In addition, the combination of the separate audited financial statements of the Company and SI for the fiscal year ended March 31, 1997 has been audited by PricewaterhouseCoopers LLP. This financial data should be read in conjunction with the Consolidated Financial Statements and the Notes thereto and the other financial information appearing elsewhere in this Annual Report on Form 10-K.

	Year ended March 31, 2001				
	2001	2000	1999	1998	1997
	(In thousands, except per share data)				
Revenues . . . . .	16,768	15,113	11,257	15,129	10,551
Net loss . . . . .	(21,676)	(17,598)	(15,326)	(12,378)	(13,337)
Net loss per share . . . . .	(1.08)	(1.11)	(1.01)	(1.06)	(1.27)
Total assets . . . . .	239,927	248,914	48,130	19,551	26,581
Working capital . . . . .	108,808	135,681	30,459	5,059	318
Cash, cash equivalents and long-term marketable securities . . . . .	160,225	218,655	31,572	8,009	16,031
Stockholders' equity . . . . .	227,564	240,944	43,958	12,859	16,501

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

The information required by this Item is attached as *Appendix A* hereto and is incorporated herein by reference.

**Item 7A. *Quantitative and Qualitative Disclosures About Market Risk***

The Company's exposure to market risk through derivative financial instruments and other financial instruments, such as investments in short-term marketable securities and long-term debt, is not material.

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

All financial statements required to be filed hereunder are filed as *Appendix B* hereto, are listed under Item 14(a), and are incorporated herein by reference.

**Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

Not Applicable.

**PART III**

**Item 10. *Directors and Executive Officers of the Registrant***

The response to this item is contained in part under the caption "Executive Officers of the Company" in Part I of this Annual Report on Form 10-K, and in part in the Company's Proxy Statement for the Annual Meeting of Stockholders for the fiscal year ended March 31, 2001 (the "2001 Proxy Statement") in the sections "Election of Directors—Nominees," and "Section 16 Beneficial Ownership Reporting Compliance," which sections are incorporated herein by reference.

**Item 11. *Executive Compensation***

The response to this item is contained in the 2001 Proxy Statement in the sections "—Executive Compensation," "—Employment Agreements with Senior Executives," and "—Compensation Committee Interlocks and Insider Participation," which sections are incorporated herein by reference.

**Item 12. *Security Ownership of Certain Beneficial Owners and Management***

The response to this item is contained in the 2001 Proxy Statement in the section "Beneficial Ownership of Common Stock," which section is incorporated herein by reference.

**Item 13. *Certain Relationships and Related Transactions***

The response to this item is contained in the 2001 Proxy Statement in the section "Executive Compensation—Certain Business Relationships," which section is incorporated herein by reference.

## PART IV

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

- (a) The following documents are filed as *Appendix B* hereto and are included as part of this Annual Report on Form 10-K:

Financial Statements:

Report of Independent Accountants  
Consolidated Balance Sheets  
Consolidated Statements of Operations  
Consolidated Statements of Comprehensive Loss  
Consolidated Statements of Cash Flows  
Consolidated Statements of Changes in Stockholders' Equity  
Notes to Consolidated Financial Statements

The Company is not filing any financial statement schedules as part of this Annual Report on Form 10-K because they are not applicable or the required information is included in the financial statements or notes thereto.

- (b) *Reports on Form 8-K.*

No reports on Form 8-K were filed during the last quarter of the Company's fiscal year ended March 31, 2001.

- (c) The list of Exhibits filed as a part of this Annual Report on Form 10-K is set forth on the Exhibit Index immediately preceding such Exhibits, and is incorporated herein by reference.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION**  
**AND RESULTS OF OPERATIONS**

American Superconductor Corporation was founded in 1987. We are focused on developing, manufacturing and selling products using two core technologies: high temperature superconductor ("HTS") wires and power electronic switches for electric power applications. We also assemble superconductor wires and power electronic switches into fully-integrated products, such as superconducting magnetic energy storage ("SMES") systems and ship propulsion motors, which we sell to end users.

We derive our revenues from contracts to perform research and development, product sales and prototype development contracts. We recognize revenues from our research and development and prototype development contracts based on the percentage of completion method measured by the relationship of costs incurred to total contract costs. We recognize revenues from product sales upon shipment, installation or acceptance, where applicable, or for some programs, on the percentage of completion method of accounting.

**RESULTS OF OPERATIONS**

**Fiscal Years Ended March 31, 2001 and March 31, 2000**

*Revenues*

Total revenues increased to \$16,768,000 in fiscal 2001 from \$15,113,000 in fiscal 2000. Revenues from our SMES business unit increased \$5,813,000 to \$9,315,000 in fiscal 2001 from \$3,502,000 in fiscal 2000, as a result of increased SMES product sales. Revenues in our HTS business unit were \$7,453,000, or \$4,158,000 less than the \$11,611,000 recorded in fiscal 2000. Lower HTS revenues were the result of a reduction in research and development contract revenues, which decreased from \$10,439,000 in fiscal 2000 to \$3,186,000 in fiscal 2001. This decrease was primarily due to the completion in fiscal 2000 of development contracts with Asea Brown Boveri (ABB), EDF, and the Electric Power Research Institute, which had revenues of \$1,050,000, \$1,050,000, and \$825,000, respectively, in fiscal 2000, and a reduction of \$2,250,000 in revenues recorded from our research and development contract with Pirelli. Fiscal 2000 revenues from Pirelli included \$2,500,000 of retroactive funding for work performed prior to the October 1, 1999 effective start date of the latest Pirelli development contract. Additionally, U. S. Government Small Business Innovation Research ("SBIR") funding decreased by \$1,936,000 in fiscal 2001 due to our increased focus on commercialization and reduced level of government SBIR proposal submission activity. These reductions in HTS contract revenues were partially offset by an increase of \$1,439,000 in HTS wire sales and an increase of \$1,114,000 in Navy prototype development contract revenues.

In addition to reported revenues, we also received funding of \$262,000 in fiscal 2001 under government cost-sharing agreements, compared to \$1,967,000 in fiscal 2000. Funding from government cost-sharing agreements is recorded as an offset to research and development and selling, general and administrative expenses, as required by government contract accounting guidelines, rather than as revenue.

*Costs and expenses*

Total costs and operating expenses in fiscal 2001 were \$51,163,000 compared to \$34,586,000 in fiscal 2000. Costs of revenue, which include costs of research and development contracts and costs of product sales and prototype development contracts, decreased by \$578,000 to \$14,116,000 in fiscal 2001 compared to \$14,694,000 in fiscal 2000. A \$7,190,000 reduction in costs of revenue related to lower contract revenue was largely offset by a \$6,612,000 increase in costs of revenue associated with greater product sales and prototype development contracts in fiscal 2000.



Adjusted research and development (“R&D”) expenses, which include amounts classified as costs of revenue and amounts offset by cost sharing funding, increased to \$28,846,000 in fiscal 2001 from \$22,632,000 in fiscal 2000. This increase was due to the continued scale-up of our internal research and development activities, including the hiring of additional personnel, the purchases of materials and equipment, and higher spending on licenses and consultants/outside contractors. A portion of the R&D expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as R&D expenses). A significantly higher proportion of R&D expenditures was classified as costs of revenue in fiscal 2000 due to the higher level of Pirelli and other contract revenues. Additionally, a portion of R&D expenses was offset by cost sharing funding. Net R&D expenses (exclusive of amounts classified as costs of revenue and amounts offset by cost sharing funding) increased to \$22,832,000 in the year ended March 31, 2001 from \$13,206,000 for fiscal 2000.

Our R&D expenditures are summarized as follows:

	<u>Year Ended 3/31/2001</u>	<u>Year Ended 3/31/2000</u>
R&D expenses per Consolidated Statements of Operations . . . . .	\$22,832,000	\$13,206,000
R&D expenditures on development contracts classified as Costs of revenue . . . . .	5,879,000	8,412,000
R&D expenditures offset by cost sharing funding . . . . .	135,000	1,014,000
Adjusted R&D expenses . . . . .	<u>\$28,846,000</u>	<u>\$22,632,000</u>

Adjusted selling, general and administrative (“SG&A”) expenses, which include amounts classified as costs of revenue and amounts offset by cost sharing funding, were \$16,163,000 in fiscal 2001, compared to \$11,684,000 in fiscal 2000. These increases were primarily due to the hiring of additional personnel and related expenses incurred to support corporate development and marketing activities and future planned growth. A significantly higher proportion of SG&A expenditures was classified as costs of revenue in fiscal 2000 due to the higher level of Pirelli and other contract revenues. Additionally, a portion of SG&A expenses was offset by cost sharing funding. Net SG&A expenses (exclusive of amounts classified as costs of revenues and amounts offset by cost sharing funding) increased to \$14,215,000 in the year ended March 31, 2001 from \$6,686,000 for fiscal 2000.

Our SG&A expenditures are summarized as follows:

	<u>Year Ended 3/31/2001</u>	<u>Year Ended 3/31/2000</u>
SG&A expenses per Consolidated Statements of Operations . . . . .	\$14,215,000	\$ 6,686,000
SG&A expenditures on development contracts classified as Costs of revenue . . . . .	1,821,000	4,045,000
SG&A expenditures offset by cost sharing funding . . . . .	127,000	953,000
Adjusted SG&A expenses . . . . .	<u>\$16,163,000</u>	<u>\$11,684,000</u>

*Non-operating expenses / Interest income*

Interest income increased to \$12,555,000 in fiscal 2001 from \$1,871,000 in fiscal 2000. This increase reflects the higher cash balances available for investment as a result of receiving \$205,625,000 in net proceeds from our March 2000 public offering of 3,500,000 shares of common stock.

We expect to continue to incur operating losses in the next year, as we continue to devote significant financial resources to our research and development activities and commercialization efforts.

We expect to be a party to agreements which, from time to time, may result in costs incurred exceeding expected revenues under such contracts. We may enter into such agreements for a variety of reasons including, but not limited to, entering new product application areas, furthering the development of key technologies, and advancing the demonstration of commercial prototypes in critical market applications.

## Fiscal Years Ended March 31, 2000 and March 31, 1999

### Revenues

Total revenues increased to \$15,113,000 in fiscal 2000 from \$11,257,000 in fiscal 1999. Revenues from our SMES business unit increased \$1,992,000 to \$3,502,000 in fiscal 2000 from \$1,510,000 in fiscal 1999 as a result of increased SMES product sales. Revenues in our HTS business unit were \$11,611,000, or \$1,863,000 more than the \$9,748,000 recorded in fiscal 1999. Higher HTS revenues were primarily associated with increased funding from a new Pirelli development program, and higher prototype development revenues from a U.S. Navy contract for the conceptual design of an HTS ship propulsion motor.

In addition to reported revenues, we also received funding of \$1,967,000 in fiscal 2000 under government cost-sharing agreements, compared to \$1,953,000 in fiscal 1999. Funding from government cost-sharing agreements is recorded as an offset to research and development and selling, general and administrative expenses, as required by government contract accounting guidelines, rather than as revenue.

### Costs and expenses

Total costs and operating expenses in fiscal 2000 were \$34,586,000 compared to \$28,508,000 in fiscal 1999. Costs of revenue increased to \$14,694,000 in fiscal 2000 compared to \$12,021,000 in fiscal 1999. This increase reflects the higher SMES product sales and the increase in prototype development revenues.

Adjusted R&D expenses increased to \$22,632,000 in fiscal 2000 from \$18,751,000 in fiscal 1999. This increase was due to the continued scale-up of our internal research and development activities in both the HTS and SMES business units, including the hiring of additional personnel, the purchases of materials and equipment and the payment of patent licensing fees. A portion of the R&D expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as R&D expenses). These R&D expenditures that were included as costs of revenue increased by \$1,077,000 during fiscal 2000 compared to fiscal 1999. This increase was due to the higher level of contract and prototype development revenue in fiscal 2000, compared to fiscal 1999. Additionally, a portion of R&D expenses was offset by cost sharing funding. Net R&D expenses (exclusive of amounts classified as costs of revenues and amounts offset by cost sharing funding) increased to \$13,206,000 in fiscal 2000 from \$10,409,000 in fiscal 1999.

Our R&D expenditures are summarized as follows:

	<u>Year Ended 3/31/2000</u>	<u>Year Ended 3/31/1999</u>
R&D expenses per Consolidated Statements of Operations . . . . .	\$13,206,000	\$10,409,000
R&D expenditures on development contracts classified as Costs of revenue . . . . .	8,412,000	7,335,000
R&D expenditures offset by cost sharing funding . . . . .	<u>1,014,000</u>	<u>1,007,000</u>
Adjusted R&D expenses . . . . .	<u>\$22,632,000</u>	<u>\$18,751,000</u>

Adjusted SG&A expenses were \$11,684,000 in fiscal 2000, compared to \$9,765,000 in fiscal 1999. These increases were primarily due to the hiring of additional personnel and related expenses incurred to support corporate development and marketing activities and future planned growth. A portion of the SG&A expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as SG&A expenses). SG&A expenditures included as costs of revenue increased by \$1,304,000 during fiscal 2000 compared to fiscal 1999. This increase was due to the higher level of contract and prototype development revenue in fiscal 2000, compared to fiscal 1999. Additionally, a portion of SG&A expenses was offset by cost sharing funding. Net SG&A expenses (exclusive of amounts classified as costs of revenues and amounts offset by cost sharing funding) increased to \$6,686,000 in fiscal 2000 from \$6,078,000 in fiscal 1999.

Our SG&A expenditures are summarized as follows:

	<u>Year Ended</u> <u>3/31/2000</u>	<u>Year Ended</u> <u>3/31/1999</u>
SG&A expenses per Consolidated Statements of Operations . . . . .	\$ 6,686,000	\$6,078,000
SG&A expenditures on development contracts classified as Costs of revenue . . . . .	4,045,000	2,741,000
SG&A expenditures offset by cost sharing funding . . . . .	953,000	946,000
Adjusted SG&A expenses . . . . .	<u>\$11,684,000</u>	<u>\$9,765,000</u>

*Non-operating expenses/Interest income*

Interest income decreased to \$1,871,000 in fiscal 2000, from \$1,921,000 in fiscal 1999. This decrease primarily reflects lower cash, cash equivalents and long-term marketable securities balances available for investment as a result of cash being used to fund our operations and to purchase capital equipment. This was partially offset by increased interest income in March 2000 as a result of our public offering of 3,500,000 shares of common stock in March 2000. We received net proceeds (after the underwriters discount but before deducting offering expenses) of \$205,625,000 from this offering.

Interest expense was \$0 in fiscal 2000 compared to \$9,800 in fiscal 1999. This decrease reflects the retirement of all long-term debt in fiscal 1999.

**LIQUIDITY AND CAPITAL RESOURCES**

At March 31, 2001, we had cash, cash equivalents and long-term marketable securities totaling \$160,225,000 compared to cash, cash equivalents and long-term marketable securities totaling \$218,655,000 at March 31, 2000. The principal uses of cash during the year ended March 31, 2001 were \$26,424,000 for funding of our operations, and \$36,081,000 for the acquisition of capital equipment, primarily for construction in progress on our new HTS manufacturing facility in Devens, Massachusetts.

Long-term accounts receivable of \$1,250,000 represents the amount due after March 31, 2002 on the \$2,500,000 recognized as revenue in the year ended March 31, 2000 for R&D work performed by us prior to the effective date (October 1, 1999) of the latest Pirelli agreement. The \$2,500,000 payment by Pirelli for R&D performed before October 1, 1999 is guaranteed by the agreement and is payable in quarterly installments over the five-year period between October 1, 1999 and September 30, 2004.

Long-term inventory of \$3,787,000 represents SMES units that have been delivered to our customer, Wisconsin Public Service Corporation (“WPS”). As the sale of these units is subject to certain return and buyback terms until after 2002, we have deferred recognition of the revenue related to this sale until the buyback provisions lapse. Long-term deferred revenue of \$3,787,000 represents the payment received related to this sale.

Goodwill of \$1,108,000 at March 31, 2001 represents the excess of the purchase price paid for the acquisition of substantially all of the assets of Integrated Electronics, LLC (“IE”) on June 1, 2000, over the fair value of IE’s assets, less amortization. The IE transaction was accounted for under the purchase method of accounting. Goodwill was initially calculated to be \$1,329,000, and is being amortized over a five-year period beginning June 1, 2000, in an amount equal to \$22,000 per month. Results of operations for IE since June 1, 2000 are incorporated in our consolidated financial results.

We have potential funding commitments (exclusive of amounts included in accounts receivable) of approximately \$12,436,000 to be received after March 31, 2001 from strategic partners and government and commercial customers, compared to \$20,064,000 at March 31, 2000. However, these commitments, including \$2,497,000 on U. S. government contracts as of March 31, 2001, are subject to certain cancellation provisions. Of the current commitment amount of \$12,436,000 (which excludes a \$3,125,000 Navy contract awarded in April 2001), approximately 40% is potentially collectable within the next 12 months.

The Company had outstanding commitments related to the construction of its new HTS wire manufacturing facility in Devens, Massachusetts of approximately \$34,929,000 at March 31, 2001.

Our policy is to invest available funds in short-term, intermediate-term, and long-term investment grade marketable securities, including but not limited to government obligations, repurchase agreements, certificates of deposit and money market funds.

We believe that our existing capital resources will be sufficient to fund our operations until we reach profitability. However, we may need additional funds sooner than anticipated if our performance deviates significantly from our current business plan, if there are significant changes in competitive or other market factors, or if unforeseen circumstances arise. There can be no assurance that such funds, whether from equity or debt financing, development contracts or other sources, will be available, or available under terms acceptable to us, if at all.

To date, inflation has not had a material impact on our financial results.

### **New Accounting Pronouncements**

In June 1998, the Financial Accounting Standards Board (“FASB”) issued Statement of Financial Accounting Standards No. 133, “Accounting for Derivative Instruments and Hedging Activities.” The Statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The Statement requires that changes in the derivative instrument’s fair value be recognized currently in earnings unless specific hedge accounting criteria are met. Special accounting for qualifying hedges allows a derivative’s gains and losses to offset related results on the hedged item in the income statement, and requires that a company must formally document, designate and assess the effectiveness of transactions that receive hedge accounting.

Statement 133 is effective for fiscal years beginning after June 15, 1999. In June 1999, FASB issued Statement 137, which defers the effective date to fiscal years beginning after June 15, 2000. A company may also implement the Statement as of the beginning of any fiscal quarter after issuance. Statement 133 cannot be applied retroactively. Statement 133 must be applied to (a) derivative instruments and (b) certain derivative instruments embedded in hybrid contracts that were issued, acquired or substantively modified after December 31, 1997 (and, at the company’s election, before January 1, 1998). We believe the impact on our financial statements of adopting Statement 133 will be immaterial.

In December 1999, the SEC issued Staff Accounting Bulletin (“SAB”) 101, “Revenue Recognition,” which outlines the basic criteria that must be met to recognize revenue and provides guidance for presentation of revenue and for disclosure related to revenue recognition policies in financial statements filed with the SEC. There was no impact on our current financial statements as a result of adopting this interpretation.

In March 2000, the FASB issued Interpretation No. 44 (“FIN 44”), “Accounting for Certain Transactions Involving Stock Compensation—an Interpretation of APB Opinion No. 25”. This Interpretation clarifies (a) the definition of employee for purposes of applying Opinion 25, (b) the criteria for determining whether a plan qualifies as a noncompensatory plan, (c) the accounting consequence of various modifications to the terms of a previously fixed stock option or award, and (d) the accounting for an exchange of stock compensation awards in a business combination. This Interpretation is effective July 1, 2000, but certain conclusions in this Interpretation cover specific events that occur after either December 15, 1998, or January 12, 2000. To the extent that this Interpretation covers events occurring during the period after December 15, 1998, or January 12, 2000, but before the effective date of July 1, 2000, the effects of applying this Interpretation are recognized on a prospective basis from July 1, 2000. There was no impact on our current financial statements as a result of adopting FIN 44. We believe the future impact on our financial statements as a result of this interpretation will be immaterial.

## **Quantitative and Qualitative Disclosures About Market Risk**

Our exposure to market risk through derivative financial instruments and other financial instruments, such as investments in short-term marketable securities and long-term debt, is not material.

## **FUTURE OPERATING RESULTS**

Various statements included herein, as well as other statements made from time to time by our representatives, which relate to future matters (including but not limited to statements concerning our future commercial success) constitute forward looking statements and are made under the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. There are a number of important factors which could cause our actual results of operations and financial condition in the future to vary from that indicated in such forward looking statements. Factors that may cause such differences include, without limitation, the risks, uncertainties and other information set forth below.

### **We have a history of operating losses and we expect to continue to incur losses in the future.**

We have been principally engaged in research and development activities. We have incurred net losses in each year since our inception. Our net loss for fiscal 1999, fiscal 2000 and fiscal 2001 was \$15,326,000, \$17,598,000 and \$21,676,000, respectively. Our accumulated deficit as of March 31, 2001 was \$128,492,000. We expect to continue to incur operating losses in the next year and there can be no assurance that we will ever achieve profitability.

### **There are a number of technological challenges that must be successfully addressed before our superconducting products can gain widespread commercial acceptance.**

Many of our products are in the early stages of commercialization and testing, while others are still under development. We do not believe any company has yet successfully developed and commercialized significant quantities of HTS wire or wire products. There are a number of technological challenges that we must successfully address to complete our development and commercialization efforts. For example, we face engineering challenges in producing HTS wire in longer lengths and commercial quantities. We also believe that several years of further development in the cable and motor industries will be necessary before a substantial number of additional commercial applications for our HTS wire in these industries can be developed and proven. We may also need to improve the quality of our HTS wire to expand the number of commercial applications for it. We may be unable to meet such technological challenges. Delays in development, as a result of technological challenges or other factors, may result in the introduction of our products later than anticipated.

### **The commercial uses of superconducting products are very limited today, and a widespread commercial market for our products may not develop.**

To date, there has been no widespread commercial use of HTS products. Although LTS products are currently used in some commercial applications, commercial acceptance of LTS products, other than for medical magnetic resonance imaging and superconducting magnetic energy storage products, has been significantly limited by the cooling requirements of LTS materials. Even if the technological hurdles currently limiting commercial uses of HTS and LTS products are overcome, it is uncertain whether a robust commercial market for those new and unproven products will ever develop. It is possible that the market demands we currently anticipate for our HTS and LTS products will not develop and that superconducting products will never achieve widespread commercial acceptance.

### **We expect to spend significant amounts on the expansion of our manufacturing capacity, and our expansion projects may not be successful.**

In anticipation of significantly increased demand for our products, we are currently building a facility exclusively dedicated to HTS wire manufacturing at the Devens Commerce Center in Devens, Massachusetts. Over the next

year, we plan to continue to use a large portion of the net proceeds from our March 2000 stock offering to fund the construction and purchase equipment for the new HTS wire manufacturing facility in Devens. We can only estimate the costs of this project, and the actual costs may be significantly in excess of our estimates. In addition, the completion of those new facilities may be delayed, or we may experience start-up difficulties or other problems once those facilities become operational. Finally, if increased demand for our products does not materialize, we will not generate sufficient revenue to offset the cost of establishing and operating these facilities.

**We have no experience manufacturing our HTS products in commercial quantities.**

To be financially successful, we will have to manufacture our products in commercial quantities at acceptable costs while also preserving the quality levels achieved in manufacturing these products in limited quantities. This presents a number of technological and engineering challenges for us. We cannot assure you that we will be successful in developing product designs and manufacturing processes that permit us to manufacture our HTS products in commercial quantities at commercially acceptable costs while preserving quality. In addition, we may incur significant start-up costs and unforeseen expenses in our product design and manufacturing efforts.

**We have historically focused on research and development activities and have limited experience in marketing and selling our products.**

We have been primarily focused on research and development of our superconducting products. Consequently, our management team has limited experience directing our commercialization efforts which are essential to our future success. To date, we only have limited experience marketing and selling our products, and there are very few people anywhere who have significant experience marketing or selling superconducting products. Once our products are ready for commercial use, we will have to develop a marketing and sales organization that will effectively demonstrate the advantages of our products over both more traditional products and competing superconducting products or other technologies. We may not be successful in our efforts to market this new and unfamiliar technology, and we may not be able to establish an effective sales and distribution organization.

We may decide to enter into arrangements with third parties for the marketing or distribution of our products, including arrangements in which our products, such as HTS wire, are included as a component of a larger product, such as a motor. We have entered into a marketing and sales alliance with GE Industrial Systems giving GE the exclusive right to offer our Distributed-SMES (D-SMES) product line in the United States to utilities and the right to sell industrial Power Quality-SMES (PQ-SMES) systems to certain of GE's global industrial accounts. By entering into marketing and sales alliances, the financial benefits to us of commercializing our products are dependent on the efforts of others. We may not be able to enter into marketing or distribution arrangements with third parties on financially acceptable terms, and third parties may not be successful in selling our products or applications incorporating our products.

**We depend on our strategic relationships with our corporate partners for the successful development and marketing of applications for our superconducting products.**

Our business strategy depends upon strategic relationships with corporate partners, which are intended to provide funding and technologies for our development efforts and assist us in marketing and distributing our products. Although we currently are party to a number of strategic relationships, we may not be able to maintain these relationships, and these relationships may not be technologically or commercially successful.

We have an agreement with Pirelli relating to HTS wire for cables used to transmit both electric power and control signals. In general, we are obligated to sell our HTS cable wire exclusively to Pirelli, and Pirelli is obligated to buy this HTS wire exclusively from us or to pay us royalties for any of this wire that it manufactures for use in these applications anywhere in the world other than Japan. Pirelli continues to provide us with substantial funding and has been critical in assisting us in the development and commercialization of HTS cable

wire. Consequently, we are significantly dependent on Pirelli for the commercial success of this cable wire in these applications.

As we move toward commercialization of several of our products, we plan to use strategic alliances as an important means of marketing and selling our products. We have entered into a marketing and sales alliance with GE giving GE the exclusive right to offer our D-SMES product line in the United States to utilities and the right to sell industrial PQ-SMES systems to certain of GE's global industrial accounts. Any strategic relationships established may not provide us with the commercial benefits we anticipate. See "Business—Strategic Relationships, Research Arrangements and Government Contracts" for a description of our significant strategic relationships.

**Our products face intense competition both from superconducting products developed by others and from traditional, non-superconducting products and alternative technologies.**

As we begin to market and sell our superconducting products, we will face intense competition both from competitors in the superconducting field and from vendors of traditional products and new technologies. There are many companies in the United States, Europe, Japan and Australia engaged in the development of HTS products, including Sumitomo Electric Industries, 3M, Intermagnetics General and Nordic Superconductor Technologies. The superconducting industry is characterized by rapidly changing and advancing technology. Our future success will depend in large part upon our ability to keep pace with advancing HTS and LTS technology and developing industry standards. Our SMES products compete with a variety of non-superconducting products such as dynamic voltage restorers, static VAR compensators ("SVC's"), static compensators ("STATCOMS"), flywheels, power electronic switches and battery-based power supply systems. In addition, competition for our Power Modules includes products from Ecostar, Inverpower, Satcon, Semikron and Trace. Research efforts and technological advances made by others in the superconducting field or in other areas with applications to the power quality and reliability markets may render our development efforts obsolete. Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we have. In addition, as the HTS, power quality and power reliability markets develop, other large industrial companies may enter those fields and compete with us. See "Business—Competition" for more information on the competition we face.

**Third parties have or may acquire patents that cover the high temperature superconducting materials we use or may use in the future to manufacture our products.**

We expect that some or all of the HTS materials and technologies we use in designing and manufacturing our products are or will become covered by patents issued to other parties, including our competitors. If that is the case, we will need either to acquire licenses to these patents or to successfully contest the validity of these patents. The owners of these patents may refuse to grant licenses to us, or may be willing to do so only on terms that we find commercially unreasonable. If we are unable to obtain these licenses, we may have to contest the validity or scope of those patents to avoid infringement claims by the owners of these patents. It is possible that we will not be successful in contesting the validity or scope of a patent, or that we will not prevail in a patent infringement claim brought against us. Even if we are successful in such a proceeding, we could incur substantial costs and diversion of management resources in prosecuting or defending such a proceeding. See "Business—Patents, Licenses and Trade Secrets" for more information on this subject.

**There are numerous patents issued in the field of superconducting materials and our patents may not provide meaningful protection for our technology.**

We own or have licensing rights under many patents and pending patent applications. However, the patents that we own or license may not provide us with meaningful protection of our technologies, and may not prevent our competitors from using similar technologies, for a variety of reasons, such as:

- the patent applications that we or our licensors file may not result in patents being issued;
- any patents issued may be challenged by third parties; and



- others may independently develop similar technologies not protected by our patents or design around the patented aspects of any technologies we develop.

Moreover, we could incur substantial litigation costs in defending the validity of our own patents. We also rely on trade secrets and proprietary know-how to protect our intellectual property. However, our non-disclosure agreements and other safeguards may not provide meaningful protection for our trade secrets and other proprietary information. See “Business—Patents, Licenses and Trade Secrets” for more information on this subject.

**Our success is dependent upon attracting and retaining qualified personnel.**

Our success will depend in large part upon our ability to attract and retain highly qualified research and development, management, manufacturing, marketing and sales personnel. Hiring those persons may be especially difficult due to the specialized nature of our business. In addition, the demand for qualified personnel is particularly acute in the New England and Wisconsin areas, where most of our operations are located, due to the currently low unemployment rate in these regions.

We are particularly dependent upon the services of Dr. Gregory J. Yurek, our co-founder and our Chairman of the Board, President and Chief Executive Officer, and Dr. Alexis P. Malozemoff, our Chief Technical Officer. The loss of the services of either of those individuals could significantly damage our business and prospects.

**Report of Independent Accountants**

To the Board of Directors and Stockholders of  
American Superconductor Corporation:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows present fairly, in all material respects, the financial position of American Superconductor Corporation (the "Company") at March 31, 2001 and 2000, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2001 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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.

*PricewaterhouseCoopers LLP*

Boston, MA  
May 11, 2001

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**

	March 31,	
	2001	2000
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents . . . . .	\$ 89,063,299	\$ 126,917,768
Accounts receivable . . . . .	13,416,068	7,317,009
Inventory . . . . .	14,300,928	7,347,668
Prepaid expenses and other current assets . . . . .	603,744	809,129
Total current assets . . . . .	117,384,039	142,391,574
Property and equipment:		
Land . . . . .	4,138,104	—
Construction in progress-building and equipment . . . . .	23,285,351	1,051,349
Equipment . . . . .	26,667,800	19,249,385
Furniture and fixtures . . . . .	2,225,296	1,670,029
Leasehold improvements . . . . .	4,741,947	3,006,814
	61,058,498	24,977,577
Less: accumulated depreciation . . . . .	(18,746,317)	(15,199,346)
Property and equipment, net . . . . .	42,312,181	9,778,231
Long-term marketable securities . . . . .	71,161,804	91,737,449
Long-term accounts receivable . . . . .	1,250,000	1,750,000
Long-term inventory . . . . .	3,787,000	1,899,282
Net investment in sales-type lease . . . . .	—	279,110
Goodwill . . . . .	1,107,735	—
Other assets . . . . .	2,924,153	1,078,610
Total assets . . . . .	\$ 239,926,912	\$ 248,914,256
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses . . . . .	\$ 8,576,022	\$ 6,339,023
Deferred revenue . . . . .	—	371,250
Total current liabilities . . . . .	8,576,022	6,710,273
Long-term deferred revenue . . . . .	3,787,000	1,259,883
Commitments (Note 8)		
Stockholders' equity:		
Common stock, \$.01 par value		
Authorized shares-50,000,000; issued and outstanding shares-		
20,290,596 in 2001 and 19,734,714 in 2000 . . . . .	202,906	197,347
Additional paid-in capital . . . . .	355,843,848	348,903,034
Deferred compensation . . . . .	(424,266)	(530,333)
Deferred contract costs . . . . .	(336,347)	(637,552)
Accumulated other comprehensive income (loss) . . . . .	769,641	(172,515)
Accumulated deficit . . . . .	(128,491,892)	(106,815,881)
Total stockholders' equity . . . . .	227,563,890	240,944,100
Total liabilities and stockholders' equity . . . . .	\$ 239,926,912	\$ 248,914,256

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

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

	Year ended March 31,		
	2001	2000	1999
Revenues:			
Contract revenue . . . . .	\$ 3,185,537	\$ 10,438,700	\$ 9,238,013
Product sales and prototype development contracts . . . . .	13,581,987	4,674,435	2,019,289
Total revenues . . . . .	<u>16,767,524</u>	<u>15,113,135</u>	<u>11,257,302</u>
Costs and expenses:			
Costs of revenue—contract revenue . . . . .	3,135,440	10,325,194	9,225,243
Costs of revenue—product sales and prototype development contracts . . . . .	10,980,753	4,368,989	2,795,380
Research and development . . . . .	22,832,357	13,206,073	10,409,414
Selling, general and administrative . . . . .	14,214,542	6,685,593	6,078,243
Total costs and expenses . . . . .	<u>51,163,092</u>	<u>34,585,849</u>	<u>28,508,280</u>
Interest income . . . . .	12,555,411	1,870,541	1,921,373
Interest expense . . . . .	—	—	(9,827)
Other income (expense), net . . . . .	164,146	4,343	13,256
Net loss . . . . .	<u>\$(21,676,011)</u>	<u>\$(17,597,830)</u>	<u>\$(15,326,176)</u>
Net loss per common share			
Basic . . . . .	<u>\$ (1.08)</u>	<u>\$ (1.11)</u>	<u>\$ (1.01)</u>
Diluted . . . . .	<u>\$ (1.08)</u>	<u>\$ (1.11)</u>	<u>\$ (1.01)</u>
Weighted average number of common shares outstanding			
Basic . . . . .	<u>20,127,348</u>	<u>15,820,074</u>	<u>15,131,679</u>
Diluted . . . . .	<u>20,127,348</u>	<u>15,820,074</u>	<u>15,131,679</u>

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

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**

	Year ended March 31,		
	2001	2000	1999
Net loss . . . . .	\$(21,676,011)	\$(17,597,830)	\$(15,326,176)
Other comprehensive income (loss)			
Foreign currency translation . . . . .	(8,591)	(14,897)	(6,535)
Unrealized gains (losses) on investments . . . . .	950,747	(168,010)	17,019
Other comprehensive income (loss) . . . . .	942,156	(182,907)	10,484
Comprehensive income (loss) . . . . .	\$(20,733,855)	\$(17,780,737)	\$(15,315,692)

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

**AMERICAN SUPERCONDUCTOR CORPORATION**

**Consolidated Statements of Cash Flows**

	Year ended March 31,		
	2001	2000	1999
<b>Cash flows from operating activities:</b>			
Net loss . . . . .	(\$21,676,011)	(\$ 17,597,830)	(\$15,326,176)
Adjustments to reconcile net loss to net cash used by operations:			
Depreciation and amortization . . . . .	4,098,904	2,253,581	1,939,189
Deferred compensation expense . . . . .	106,067	106,067	—
Deferred warrant costs . . . . .	354,495	444,862	328,263
Stock compensation expense . . . . .	222,014	96,962	204,511
Changes in operating asset and liability accounts :			
Accounts receivable . . . . .	(5,546,781)	(4,967,798)	(1,107,576)
Inventory . . . . .	(8,580,998)	(4,222,398)	(1,794,579)
Prepaid expenses and other current assets . . . . .	205,385	(270,644)	6,943
Accounts payable and accrued expenses . . . . .	2,236,999	2,167,075	838,486
Deferred revenue—current and long-term . . . . .	2,155,867	1,631,133	(187,285)
Net cash used by operating activities . . . . .	(26,424,059)	(20,358,990)	(15,098,224)
<b>Cash flows from investing activities:</b>			
Purchase of property and equipment . . . . .	(35,897,926)	(5,932,079)	(3,613,900)
Purchase of long-term marketable securities . . . . .	—	(85,302,630)	(442,334)
Sale of long-term marketable securities . . . . .	21,526,392	—	—
Purchase of assets of Integrated Electronics, LLC. . . . .	(755,000)	—	—
Net investment in sales-type lease . . . . .	279,110	8,000	58,830
Increase in other assets . . . . .	(2,175,930)	(584,266)	(488,177)
Net cash used in investing activities . . . . .	(17,023,354)	(91,810,975)	(4,485,581)
<b>Cash flows from financing activities:</b>			
Payments on notes payable . . . . .	—	—	(29,609)
Payments on long-term debt . . . . .	—	—	(3,141,793)
Net proceeds from issuance of common stock . . . . .	5,592,944	214,118,591	45,882,207
Net cash provided by financing activities . . . . .	5,592,944	214,118,591	42,710,805
Net increase (decrease) in cash and cash equivalents . . . . .	(37,854,469)	101,948,626	23,127,000
Cash and cash equivalents at beginning of year . . . . .	126,917,768	24,969,142	1,842,142
Cash and cash equivalents at end of year . . . . .	<u>\$ 89,063,299</u>	<u>\$126,917,768</u>	<u>\$ 24,969,142</u>
Supplemental schedule of cash flow information:			
Cash paid for interest . . . . .	\$ 0	\$ 0	\$ 119,789
Noncash issuance of common stock . . . . .	\$ 1,406,206	\$ 203,029	\$ 204,511

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

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Common Stock		Additional Paid-in Capital	Deferred Compensation	Deferred Contract Costs	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Number of Shares	Par Value						
Balance at March 31, 1998 . . .	11,756,793	\$117,568	\$ 87,961,911	\$ —	\$(1,328,446)	\$ (92)	\$(73,891,875)	\$ 12,859,066
Exercise of stock options . . .	99,976	1,000	266,250					267,250
Secondary public offering of common stock . . . . .	3,504,121	35,041	45,579,916					45,614,957
Stock compensation expense . . . . .	17,766	178	204,333					204,511
Amortization of deferred warrant costs . . . . .			18,208		310,055			328,263
Unrealized loss on investments . . . . .						(6,535)		(6,535)
Cumulative translation adjustment . . . . .						17,019		17,019
Net loss . . . . .							(15,326,176)	(15,326,176)
Balance at March 31, 1999 . . .	15,378,656	\$153,787	\$134,030,618	\$ —	\$(1,018,391)	\$ 10,392	\$(89,218,051)	\$ 43,958,355
Exercise of stock options . . .	692,737	6,927	9,051,762					9,058,689
Secondary public offering of common stock . . . . .	3,500,000	35,000	205,024,902					205,059,902
Exercise of stock warrants . .	82,264	823	(823)					0
Deferred compensation . . . .	74,000	740	635,660	(636,400)				0
Amortization of deferred compensation . . . . .				106,067				106,067
Stock compensation expense . . . . .	7,057	70	96,892					96,962
Amortization of deferred warrant costs . . . . .			64,023		380,839			444,862
Unrealized loss on investments . . . . .						(168,010)		(168,010)
Cumulative translation adjustment . . . . .						(14,897)		(14,897)
Net loss . . . . .							(17,597,830)	(17,597,830)
Balance at March 31, 2000 . . .	19,734,714	197,347	348,903,034	(530,333)	(637,552)	(172,515)	(106,815,881)	240,944,100
Exercise of stock options . . .	490,068	4,901	5,572,335					5,577,236
Purchase of IE . . . . .	37,500	375	1,077,750					1,078,125
Exercise of stock warrants . .	18,253	182	15,526					15,708
Amortization of deferred compensation . . . . .				106,067				106,067
Stock compensation expense . . . . .	10,061	101	221,913					222,014
Amortization of deferred warrant costs . . . . .			53,290		301,205			354,495
Unrealized gain on investments . . . . .						950,747		950,747
Cumulative translation adjustment . . . . .						(8,591)		(8,591)
Net loss . . . . .							(21,676,011)	(21,676,011)
Balance at March 31, 2001 . . .	20,290,596	\$202,906	\$355,843,848	\$(424,266)	\$(336,347)	\$769,641	\$(128,491,892)	\$227,563,890

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



**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS**

**1. Nature of the Business**

American Superconductor Corporation (the “Company”), which was formed on April 9, 1987, is a world leader in developing and manufacturing products using superconducting materials and power electronic switches for electric power applications. The focus of the Company’s development and commercialization efforts is on electrical equipment for use by electric utilities and industrial and commercial users of electrical power. For large-scale applications, the Company’s development efforts are focused on high temperature superconducting (“HTS”) power transmission cables, motors, generators and transformers. In the area of industrial power quality and transmission network power reliability, the Company is focused on marketing and selling commercial superconducting magnetic energy storage (“SMES”) devices, on development and commercialization of new SMES products, and on development of power electronic subsystems, in the area of power quality and transmission network reliability for industrial, commercial and utility customers. The Company operates in two business segments.

The Company currently derives a substantial portion of its revenue from research and development contracts. The Company has recorded contract revenue related to research and development contracts of \$3,185,537, \$10,438,700 and \$9,238,013 for the fiscal years ended March 31, 2001, 2000 and 1999, respectively. As discussed in Note 9, a significant portion of this current contract revenue relates to a development contract with Pirelli Cable and Systems (“Pirelli”).

Research and development (“R&D”) and selling, general and administrative expenses (“SG&A”) which are incurred on development contracts are classified as costs of revenue rather than as R&D and SG&A expenses and were approximately as follows:

	<u>Year Ended</u> <u>3/31/2001</u>	<u>Year Ended</u> <u>3/31/2000</u>	<u>Year Ended</u> <u>3/31/1999</u>
Research and development expenses . . . . .	\$5,879,000	\$8,412,000	\$7,335,000
Selling, general and administrative expenses . . . . .	\$1,821,000	\$4,045,000	\$2,741,000

**2. Summary of Significant Accounting Policies**

A summary of the Company’s significant accounting policies follows:

*Basis of Presentation*

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances are eliminated.

On June 1, 2000, the Company acquired substantially all of the assets of Integrated Electronics, LLC (“IE”). The IE acquisition was accounted for under the purchase method of accounting. Goodwill of \$1,329,282 represented the excess of the purchase price of \$1,833,125 over the fair value of the acquired assets of \$503,843 at June 1, 2000. The purchase price consisted of cash paid to IE of \$675,000, miscellaneous transaction costs of \$80,000, and the value of 37,500 shares of the Company’s common stock at June 1, 2000 of \$1,078,125. The fair value of the assets acquired were accounts receivable of \$52,278, inventory of \$259,980, and fixed assets of \$191,585. These asset purchases are included under “Purchase of assets of Integrated Electronics, LLC” in the Consolidated Statements of Cash Flows for the period ended March 31, 2001 and thus are excluded from the “Changes in operating asset and liability accounts” section of the Consolidated Statements of Cash Flows.

Certain prior year amounts have been reclassified to be consistent with current year presentation.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

*Cash Equivalents*

The Company considers all highly liquid debt instruments with original maturities of three months or less to be cash equivalents. Cash equivalents consist of government obligations, short-term certificates of deposit, repurchase agreements, and other debt instruments.

*Accounts Receivable*

Due to scheduled billing requirements specified under certain contracts, a portion of the Company's accounts receivable balance at March 31, 2001 and 2000 was unbilled. The unbilled portion included in the accounts receivable balance was approximately \$5,815,000 or 43% of total accounts receivable and \$4,419,000 or 60% of total accounts receivable at March 31, 2001 and 2000, respectively. The Company expects most of the unbilled balance at March 31, 2001 to be billed in the first quarter of the fiscal year ending March 31, 2002, excluding the unbilled receivable associated with the Pirelli development contract that is billable and collectable over the next 12 months. Included in accounts receivable is \$5,749,000 due from one customer related to the joint marketing of SMES units with the Company.

*Long-term Accounts Receivable*

Long-term accounts receivable consist of amounts due more than 12 months from the balance sheet date. The \$1,250,000 account balance represents the amount due after March 31, 2002 on the \$2,500,000 recognized as revenue in the year ended March 31, 2000 for R&D work performed by the Company prior to the effective date (October 1, 1999) of the latest Pirelli agreement. The \$2,500,000 of revenue recognized from Pirelli for R&D performed before October 1, 1999 is guaranteed by the agreement and is payable in quarterly installments over the five-year period between October 1, 1999 and September 30, 2004.

*Long-term Marketable Securities*

Long-term marketable securities, with original maturities of more than 12 months when purchased, consist primarily of U.S. Treasury Notes, U.S. government agency securities, corporate bonds and other debt securities, in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The Company determines the appropriate classification of its marketable securities at the time of purchase and re-evaluates such classification as of each balance sheet date.

*Inventories*

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

*Long-term Inventory*

Long-term inventory of \$3,787,000 represents SMES units that have been ordered and delivered to our customer, Wisconsin Public Service Corporation ("WPS"). As the sale of these units is subject to certain return and buyback provisions until after 2002, the Company has deferred recognition of the revenue related to this sale until the buyback provisions lapse. Long-term deferred revenue of \$3,787,000 represents the payment received related to this sale.

*Property and Equipment*

Equipment and Furniture and fixtures are recorded at cost and depreciated using the straight-line method over their estimated useful lives, which range from 3 to 7 years. Leasehold improvements are recorded at cost and amortized over the shorter of the useful life of the improvement or the remaining term of the lease.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

Expenditures for maintenance and repairs are expensed as incurred. Upon retirement or other disposition of assets, the costs and related accumulated depreciation are eliminated from the accounts and the resulting gain or loss is reflected in income.

*Goodwill*

Goodwill of \$1,107,735 at March 31, 2001 represents the excess of the purchase price paid for the acquisition of substantially all of the assets of IE on June 1, 2000, over the fair value of IE's assets, less amortization. The IE transaction was accounted for under the purchase method of accounting. Goodwill was initially calculated to be \$1,329,282, and is being amortized over a five-year period beginning June 1, 2000, in an amount equal to \$22,155 per month. Results of operations for IE since June 1, 2000 are incorporated in our consolidated financial results.

*Other Assets*

Other assets at March 31, 2001 and 2000 consisted of the following:

	<u>2001</u>	<u>2000</u>
Licenses . . . . .	\$1,070,747	\$ 940,747
Patents . . . . .	2,601,705	570,950
Deposits . . . . .	75,823	60,649
	<u>3,748,275</u>	<u>1,572,346</u>
Less: accumulated amortization . . . . .	<u>(824,122)</u>	<u>(493,736)</u>
	<u>\$2,924,153</u>	<u>\$1,078,610</u>

External license and patent costs are amortized to expense on a straight-line basis over periods not exceeding 7 years. The carrying value of intangible assets is periodically reviewed by the Company and impairments are recognized when the expected future operating cash flows derived from such intangible assets is less than their carrying value.

Effective March 31, 1998, the Company signed an agreement with Lucent Technologies, Inc. ("Lucent") granting the Company a royalty-bearing, non-exclusive, worldwide license for superconductor wire under Lucent's portfolio of high temperature superconductor patents and patent applications. The license runs from March 31, 1998 until the expiration of the last-to-expire patent in the portfolio.

Effective November 17, 1999, the Company signed an agreement with Massachusetts Institute of Technology ("MIT") granting the Company an exclusive, royalty-bearing, worldwide license for second-generation wire, tape, and conductors made under an MIT patent and patent application. The license is exclusive until the first to occur of eight years after the first commercial sale of a licensed product or eight years after the first commercial use of a licensed process, or November 17, 2010. Thereafter the license remains exclusive as long as running royalties paid to MIT remain above a certain amount per year, or becomes non-exclusive until the end of the term of the patent rights.

Effective March 1, 2000, the Company signed an agreement with Oak Ridge National Laboratory ("ORNL") granting the Company a royalty-bearing, non-exclusive, worldwide license for second-generation superconductor wire or tape made under ORNL patents and patent applications. The license runs from March 1, 2000 until the expiration of the last-to-expire licensed patent.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

Effective October 27, 2000, the Company signed a development and license agreement with Lawrence Berkeley National Laboratory (“LBL”) granting the Company a royalty-bearing, exclusive, worldwide license for second-generation superconductor wire or tape made under LBL patents that are developed under this agreement. The license runs from October 27, 2000 until the expiration of the last-to-expire licensed patent.

*Revenue Recognition*

The Company has entered into contracts to perform research and development (see Note 9). Revenues from these contracts and prototype development contracts are recognized utilizing the percentage of completion method, measured by the relationship of costs incurred to total contract costs. Costs include direct engineering and development costs and applicable overhead. The Company recognizes its revenue on product sales upon shipment, installation or acceptance, where applicable, or for certain contracts, on the percentage of completion method of accounting measured by the relationship of total costs incurred to total contract costs. Customer deposits are recorded as deferred revenue until the related sales are recognized. The Company rents equipment to customers on a monthly basis and recognizes rental income as it is earned.

*Research and Development Costs*

Research and development costs are expensed as incurred.

*Income Taxes*

Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each fiscal year end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. No current or deferred income taxes have been provided because of the net operating losses incurred by the Company since its inception.

*Computation of Net Loss per Common Share*

The Company has adopted Statement of Financial Accounting Standards (“SFAS”) No. 128, “Earnings Per Share” which requires presentation of basic earnings per share (“EPS”) and, for companies with complex capital structures, diluted EPS. Basic EPS excludes dilution and is computed by dividing net income available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS includes dilution and is computed using the weighted average number of common and dilutive common equivalent shares outstanding during the period. Common equivalent shares include the effect of the exercise of stock options and warrants. For the years ended March 31, 2001, 2000 and 1999, common equivalent shares of 2,523,769, 1,788,401 and 655,843, respectively, were not included in the calculation of diluted EPS as the effect of these was antidilutive.

*Foreign Currency Translation*

The functional currency of the Company’s foreign subsidiary is the local currency. The assets and liabilities of this operation are translated into U.S. dollars at the exchange rate in effect at the balance sheet date and income and expense items are translated at average rates for the period. Cumulative translation adjustments are excluded from net loss and shown as a separate component of stockholders’ equity. Foreign currency transaction gains and losses are included in the net loss and have not been material to date.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

*Risks and Uncertainties*

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and would impact future results of operations and cash flows.

The Company invests its cash and cash equivalents with high-credit, quality financial institutions and invests primarily in investment grade-marketable securities, including, but not limited to, government obligations, repurchase agreements, and money market funds.

The Company's accounts receivable are comprised of amounts owed by government agencies and commercial companies. The Company does not require collateral or other security to support customer receivables. The Company believes any credit losses will not be material.

**3. Long-term Marketable Securities**

Long-term marketable securities at March 31, 2001 and 2000 consisted of U.S. government and government agency securities and corporate bonds:

	<u>2001</u>	<u>2000</u>
Aggregate Cost . . . . .	\$70,352,896	\$91,879,288
Fair Value . . . . .	71,161,804	91,737,449
Gross Unrealized Gain (Loss) . . . . .	\$ 808,908	\$ (141,839)

The Company's long-term marketable securities are classified as available-for-sale securities and, accordingly, are recorded at amortized cost plus accrued interest which approximates fair value. The difference between cost and fair value is included in stockholders' equity. All of these securities mature in one to three years.

**4. Inventories**

Inventories at March 31, 2001 and 2000 consisted of the following:

	<u>2001</u>	<u>2000</u>
Raw materials . . . . .	\$ 4,476,701	\$3,819,059
Work-in-progress . . . . .	9,408,480	2,926,799
Finished goods . . . . .	415,747	601,810
	<u>\$14,300,928</u>	<u>\$7,347,668</u>

**5. Accounts payable and accrued expenses**

Accounts payable and accrued expenses at March 31, 2001 and 2000 consisted of the following:

	<u>2001</u>	<u>2000</u>
Accounts payable . . . . .	\$3,281,217	\$3,230,176
Accrued employee expenses . . . . .	326,184	645,384
Accrued executive bonus . . . . .	369,802	694,363
Accrued expenses . . . . .	3,832,565	1,221,680
Accrued vacation . . . . .	766,254	547,420
	<u>\$8,576,022</u>	<u>\$6,339,023</u>

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

**6. Income Taxes**

The reconciliation between the statutory federal income tax rate and the Company's effective income tax rate is shown below.

	Year ended March 31		
	2001	2000	1999
Statutory federal income tax rate . . . . .	(34)%	(34)%	(34)%
State income taxes, net federal benefit . . . . .	(6)%	(6)%	(6)%
Nondeductible expenses . . . . .	1 %	1 %	1 %
Research & development credit . . . . .	(3)%	(2)%	(4)%
Valuation allowance . . . . .	42 %	41 %	43 %
Effective income tax rate . . . . .	0 %	0 %	0 %

The principal components of the Company's deferred tax liabilities and assets were the following:

	March 31	
	2001	2000
Deferred tax assets:		
Net operating loss carryforward . . . . .	\$ 58,784,000	\$ 42,776,000
Research and development and other credits . . . . .	2,648,000	1,845,000
Depreciation and other . . . . .	1,846,000	1,071, 000
Valuation allowance . . . . .	(63,278,000)	(45,692,000)
Net . . . . .	\$ —	\$ —

At March 31, 2001 the Company had available for federal income tax purposes net operating loss carryforwards of approximately \$150,324,000, which expire in years 2005 through 2020. This includes approximately \$15,086,000 of SI acquired net operating losses which begin to expire in 2003, and their utilization by the Company will be subject to annual limitations. The Company has recorded a deferred tax asset of approximately \$12,475,000 reflecting the benefit of deductions from the exercise of stock options. This deferred tax asset has been fully reserved until it is more likely than not that the tax benefit from the exercise of stock options will be realized. The benefit from this \$12,475,000 will be recorded as a credit to additional paid-in capital when realized. Research and development and other credit carryforwards amounting to approximately \$2,648,000 are available to offset federal and state income taxes and expire in years 2005 through 2020. Under current tax law, the utilization of net operating loss carryforwards may be subject to annual limitations in the event of certain changes in ownership.

**7. Stockholders' Equity**

*The Offerings*

On March 6, 2000 the Company completed a public offering of 3,500,000 shares of its common stock and received net proceeds (after the underwriters discount but before deducting offering expenses) of \$205,625,000. On April 22, 1998 the Company completed a public offering of 3,504,121 shares of its common stock and received net proceeds (after the underwriters discount but before deducting offering expenses) of \$46,114,000, of which approximately \$3,142,000 was used to retire the Company's subordinated notes.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

**Stock-Based Compensation Plans**

The Company has adopted the disclosure only option under Statement of Financial Accounting Standards (SFAS) 123 “Accounting for Stock-Based Compensation”. Pro forma information regarding net income and earnings per share is required by SFAS 123, and has been determined as if the Company had accounted for its stock options under the fair value method of that Statement. Consistent with the method of SFAS 123, the Company’s net loss and net loss per share would have increased to the pro forma amounts indicated below:

		<b>For the fiscal years ended March 31,</b>		
		<b>2001</b>	<b>2000</b>	<b>1999</b>
Net loss (in thousands) . . . . .	As reported	\$(21,676)	\$(17,598)	\$(15,326)
	Pro forma	\$(25,446)	\$(21,368)	\$(17,960)
Loss per share . . . . .	As reported	\$ (1.08)	\$ (1.11)	\$ (1.01)
	Pro forma	\$ (1.26)	\$ (1.35)	\$ (1.19)

The pro forma amounts include the effects of all activity under the Company’s stock-based compensation plans since April 1, 1997. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions used for grants: a weighted average risk free interest rate of 5.7%, 6.0% and 5.3% in fiscal 2001, fiscal 2000 and fiscal 1999, respectively; expected stock price volatility of 85% for fiscal 2001, 65% for fiscal 2000 and 60% for fiscal 1999; no dividends; and a weighted average life of the options of 5 years. The weighted average fair value of options granted during fiscal 2001, fiscal 2000 and fiscal 1999 was \$24.85 per share, \$7.45 per share and \$7.36 per share, respectively. The above amounts may not be indicative of future expense because amounts are recognized over the vesting period and the Company expects it will have additional grants and related activity under these plans in the future.

The Company has six stock option plans including three Directors’ Plans. The stock option plans (the “Plans”) include the 1987 Stock Plan (the “1987 Plan”), the 1993 Stock Option Plan (the “1993 Plan”), the 1996 Stock Incentive Plan (the “1996 Plan”), the 1991 Director Stock Option Plan (the “1991 Director Plan”), the 1994 Director Stock Option Plan (the “1994 Director Plan”), and the 1997 Director Stock Option Plan (the “1997 Director Plan”). The Board of Directors authorized the issuance of 74,000 shares of restricted stock to certain officers in fiscal year 2000. The restriction on sale can be removed upon meeting certain corporate performance targets. The Company recorded expenses of \$106,067 and \$106,067 in fiscal 2001 and fiscal 2000, respectively, related to this issuance. Additionally, the Board of Directors authorized options for an additional 175,000 shares related to the acquisition of IE. All options issued under the IE plan are nonqualified. The Plans are administered by the Compensation Committee of the Board of Directors and permit the Company to sell or award common stock or to grant stock options for the purchase of common stock.

The Plans provide for the issuance of incentive stock options and non-qualified stock options to purchase the Company’s common stock. In the case of incentive stock options, the exercise price shall be equal to at least the fair market value of the common stock, as determined by the Board of Directors, on the date of grant. The 1991, 1994 and 1997 Director Plans are stock option plans for members of the Board of Directors who are not also employees of the Company (“outside directors”). The 1997 Director Plan provides for the automatic grant of stock options for the purchase of common stock by outside directors at an exercise price equal to fair market value at the grant date. No further grants may be made under the 1987 Plan, the 1991 Director Plan or the 1994 Director Plan.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

Options granted under the Plans generally become exercisable in equal annual increments over a four or five year period and expire 10 years from the date of grant or from two to three months after termination of employment.

The following table summarizes information about stock options outstanding at March 31, 2001.

<u>Range of Exercise Price</u>	<u>Outstanding</u>		<u>Exercisable</u>		
	<u>Number Outstanding At 3/31/01</u>	<u>Weighted Average Remaining Contractual Life</u>	<u>Weighted Average Exercise Price</u>	<u>Number Exercisable at 3/31/01</u>	<u>Weighted Average Exercise Price</u>
\$ 0.00– 5.89	74,329	0.1	\$ 0.01	74,329	\$ 0.01
5.89–11.78	1,489,302	7.3	10.22	586,920	9.74
11.78–17.66	978,998	7.4	13.09	448,368	13.14
17.66–23.55	397,330	3.1	20.55	395,730	20.56
23.55–29.44	747,850	9.1	26.01	0	0.00
29.44–35.33	750,000	9.3	32.56	0	0.00
35.33–41.21	66,500	9.6	36.82	0	0.00
41.21–47.10	41,500	9.6	46.13	0	0.00
47.10–58.88	41,000	8.9	58.88	10,000	58.88
\$ 0.00–58.88	<u>4,586,809</u>		<u>\$18.93</u>	<u>1,515,347</u>	<u>\$13.42</u>



**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

The following table summarizes information about stock options outstanding at March 31, 2001.

The following table summarizes the information concerning currently outstanding and exercisable options:

	<u>Shares</u>	<u>Weighted average Exercise Price</u>	<u>Number Exercisable</u>
Outstanding at March 31, 1998 . . . . .	2,624,490	\$ 12.63	1,215,883
Granted . . . . .	765,550	12.08	
Exercised . . . . .	(99,976)	2.67	
Canceled . . . . .	(54,538)	11.51	
Outstanding at March 31, 1999 . . . . .	3,235,526	\$ 12.82	1,563,057
Granted . . . . .	946,750	13.11	
Exercised . . . . .	(692,737)	13.10	
Canceled . . . . .	(24,818)	10.42	
Outstanding at March 31, 2000 . . . . .	3,464,721	\$ 12.86	1,398,191
Granted . . . . .	1,703,200	29.33	
Exercised . . . . .	(490,068)	11.61	
Canceled . . . . .	(91,044)	14.48	
Outstanding at March 31, 2001 . . . . .	<u>4,586,809</u>	<u>18.93</u>	<u>1,515,347</u>
Available for grant at March 31, 2001 . . . . .		<u>1,593,587</u>	

*Stock Purchase Warrants*

The Company recorded an increase to additional paid-in capital and a corresponding charge to deferred warrant costs of approximately \$336,000 in January 1998 related to the issuance of stock purchase warrants for 250,500 shares of common stock at an exercise price of \$10.20 per share which become exercisable over a five-year period following the date of grant. These warrants were granted in consideration of ongoing financial services being provided to the Company. Expense related to these warrants was approximately \$67,000, \$67,000 and \$67,000 for the fiscal years ended March 31, 2001, 2000 and 1999, respectively.

The Company also granted warrants in 1996 and 1998 to the Electric Power Research Institute (EPRI). See Note 9.

**8. Commitments**

The Company rents its headquarters in Westborough, Massachusetts under an operating lease, which expires in May 2003. In October 2000 the Company leased additional facilities in Westborough for the development of electric motor and generator technology under an operating lease that expires in 2005. The Company also rents operating facilities near Madison, Wisconsin under two leases, which expire on December 31, 2003, and two facilities near Milwaukee, Wisconsin, under leases which expire in 2001. The Company has an option to extend the Westborough, Massachusetts and Madison, Wisconsin leases for additional five-year periods. Under all leases the Company pays for real estate taxes, certain insurance coverage and operating expenses.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

Rent expense under the leases mentioned above were as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Rent expense . . . . .	\$1,435,000	\$1,228,000	\$1,154,000

Minimum future lease commitments at March 31, 2001 were as follows:

<u>For the years ended March 31</u>	<u>Total</u>
2002 . . . . .	1,572,000
2003 . . . . .	1,512,000
2004 . . . . .	656,000
2005 . . . . .	276,000
2006 . . . . .	138,000

The Company had outstanding commitments related to the construction of its new HTS wire manufacturing facility in Devens, Massachusetts of approximately \$34,929,000 at March 31, 2001.

**9. Research and Development Agreements**

In December 1999, the Company extended its development contract with Pirelli Cables and Systems, a stockholder of the Company, to jointly develop high temperature superconducting cable wires. Pirelli agreed to provide the Company with up to \$13,800,000 in additional funding over the five-year period between October 1, 1999 and September 30, 2004. \$3,500,000 of that funding was recognized as revenue in fiscal 2000, of which \$2,500,000 was for R&D work performed by the Company prior to the effective date (October 1, 1999) of the latest Pirelli agreement. The Pirelli alliance was originally established in February 1990; in the 11-year period between 1990 and March 31, 2001, the Company received development funding of approximately \$21,600,000 from Pirelli.

In fiscal 1998, the Company entered into research and development contracts with Asea Brown Boveri (ABB) and EDF, an affiliate of which is a stockholder of the Company, to develop HTS wire for power transformers. The ABB and EDF agreements, each of which called for the payment of \$5,000,000 in development fees to the Company over four years, were terminated in April 2000, with ABB having paid a cumulative total of \$4,350,000 and EDF \$4,450,000. The Company recorded revenues under these contracts as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Pirelli . . . . .	\$2,000,000	\$4,250,000	\$2,000,000
ABB . . . . .	—	1,050,000	1,025,000
EDF . . . . .	—	1,050,000	1,600,000
	<u>\$2,000,000</u>	<u>\$6,350,000</u>	<u>\$4,625,000</u>

Future funding commitments under the Pirelli contract are \$8,300,000 through September 2004. At March 31, 2001, \$1,750,000 due under the development contract with Pirelli was included in accounts receivable, of which \$1,250,000 was classified as long-term.

In March 1996, the Company entered into a strategic alliance with the Electric Power Research Institute (EPRI) to develop and commercialize a possible next-generation HTS wire. This agreement ended on March 31, 2000. In March 1996, under the first phase of the agreement, the Company granted a warrant for 100,000 shares of common stock to EPRI at \$14.00 per share which became exercisable over a five-year period following the date of grant. In March 1998, under the second phase of the agreement, the Company granted to EPRI another

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

warrant to purchase 110,000 shares of common stock of the Company at \$13.94 per share, which become exercisable over the next five years. The Company will receive exclusive license rights to intellectual property from EPRI. The Company recorded an increase to additional paid-in capital and a corresponding charge to deferred contract costs of \$618,000 and \$637,000 in fiscal 1998 and 1997, respectively, relating to these warrants. Warrant expense related to these agreements was approximately \$234,000, \$314,000 and \$243,000 for the fiscal years ended March 31, 2001, 2000 and 1999, respectively.

**10. Cost sharing arrangements**

The Company has entered into several cost-sharing arrangements with various agencies of the United States government. Funds paid to the Company under these agreements are used to directly offset the Company's research and development and selling, general and administrative expenses and to purchase capital equipment. The Company recorded costs and funding under these agreements of \$645,000 and \$262,000, respectively, for fiscal 2001, of \$3,971,000 and \$1,967,000, respectively, for fiscal 2000, and \$4,325,000 and \$1,953,000, respectively, for fiscal 1999. At March 31, 2001, total funding received to date under these agreements was \$12,812,000. Future funding expected to be received under existing agreements is approximately \$1,433,000 subject to continued future funding allocations.

**11. Employee Benefit Plans**

The Company has implemented a deferred compensation plan under Section 401(k) of the Internal Revenue Code. Any contributions by the Company are discretionary. The company instituted a stock match program in July 1998 under which the Company matched 25% of the first 4% of eligible contributions to the plan. Effective July 1, 2000 this contribution increased to 6% of eligible contributions. The Company recorded expense of \$234,472, \$128,687 and \$80,575 in fiscal years 2001, 2000 and 1999, respectively, and corresponding charges to additional paid-in capital related to this program. The Company does not have post-retirement or post-employment benefit plans.

**12. Related Party Transaction**

The company recorded a sale of \$1,100,000 on the shipment of a SMES unit to a division of EDF, the Company's largest shareholder.

**13. Business Segment Information**

The Company has adopted Statement of Financial Accounting Standard No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("FAS 131"). The Company has two reportable business segments as defined by FAS 131—High Temperature Superconducting ("HTS") business segment, and the Superconducting Magnetic Energy Storage ("SMES") business segment.

The HTS business segment develops and commercializes HTS wire, wire products and systems. The focus of this segment's development effort is on power transmission cables and electric motors and generators.

The SMES business segment is focused on marketing and selling commercial low temperature SMES devices, on development and commercialization of new SMES products, and on development and commercialization of power electronic switches for the power quality and reliability marketplace.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

The operating segment results for the HTS and SMES business segments are as follows:

	<b>Fiscal Year Ended March 31</b>		
	<b>2001</b>	<b>2000</b>	<b>1999</b>
<b>Net Sales</b>			
HTS . . . . .	\$ 7,452,539	\$ 11,610,772	\$ 9,747,580
SMES . . . . .	9,314,985	3,502,363	1,509,722
Total . . . . .	<u>\$ 16,767,524</u>	<u>\$ 15,113,135</u>	<u>\$ 11,257,302</u>
<b>Operating Income (loss)</b>			
HTS . . . . .	\$(25,858,051)	\$(12,448,859)	\$(10,981,720)
SMES . . . . .	(6,943,149)	(5,788,754)	(5,246,240)
Unallocated corporate expenses . . . . .	(1,594,368)	(1,235,101)	(1,023,018)
Total . . . . .	<u>\$(34,395,568)</u>	<u>\$(19,472,714)</u>	<u>\$(17,250,978)</u>

The segment assets for the HTS and SMES business segments are as follows

	<b>March 31,</b>	
	<b>2001</b>	<b>2000</b>
HTS . . . . .	\$ 48,501,903	\$ 16,265,634
SMES . . . . .	31,199,906	13,993,405
Corporate cash and marketable securities . . . . .	160,225,103	218,655,217
Total . . . . .	<u>\$239,926,912</u>	<u>\$248,914,256</u>

Other significant segment information is as follows:

	<b>Fiscal Year Ended March 31,</b>		
	<b>2001</b>	<b>2000</b>	<b>1999</b>
<b>Depreciation and amortization</b>			
HTS . . . . .	\$3,095,359	\$1,838,225	\$1,641,449
SMES . . . . .	1,003,545	415,356	297,740
Total . . . . .	<u>\$4,098,904</u>	<u>\$2,253,581</u>	<u>\$1,939,189</u>
<b>Capital expenditures</b>			
HTS . . . . .	\$33,165,330	\$4,017,478	
SMES . . . . .	2,915,591	1,914,601	
Total . . . . .	<u>\$36,080,921</u>	<u>\$5,932,079</u>	

The accounting policies of the business segments are the same as those described in Note 2, except that certain corporate expenses which we do not believe are specifically attributed or allocable to either business segment have been excluded from the segment operating loss.

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

**14. Quarterly Financial Data**

Fiscal year ended March 31, 2001:

<u>Three Months Ended</u>	<u>June 30, 2000</u>	<u>September 30, 2000</u>	<u>December 31, 2000</u>	<u>March 31, 2001</u>
Total Revenues . . . . .	\$ 3,924,000	\$ 4,718,000	\$ 5,607,000	\$ 2,519,000
Operating loss . . . . .	\$(7,956,000)	\$(8,557,000)	\$(7,279,000)	\$(10,604,000)
Net loss . . . . .	\$(4,457,000)	\$(5,045,000)	\$(4,130,000)	\$ (8,044,000)
Net loss per common share . . . . .	\$ (0.22)	\$ (0.25)	\$ (0.20)	\$ (0.41)

Fiscal year ended March 31, 2000:

<u>Three Months Ended</u>	<u>June 30, 1999</u>	<u>September 30, 1999</u>	<u>December 31, 1999</u>	<u>March 31, 2000</u>
Total Revenues . . . . .	\$ 2,270,000	\$ 2,533,000	\$ 5,032,000	\$ 5,278,000
Operating loss . . . . .	\$(5,333,000)	\$(5,097,000)	\$(3,113,000)	\$(5,930,000)
Net loss . . . . .	\$(4,994,000)	\$(4,789,000)	\$(2,883,000)	\$(4,932,000)
Net loss per common share . . . . .	\$ (0.32)	\$ (0.31)	\$ (0.19)	\$ (0.29)

**15. New Accounting Pronouncements**

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities". The Statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The Statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. Special accounting for qualifying hedges allows a derivative's gains and losses to offset related results on the hedged item in the income statement, and requires that a company must formally document, designate and assess the effectiveness of transactions that receive hedge accounting.

Statement 133, as amended by Statement 138, effective July 1, 2000, is effective for fiscal years beginning after June 15, 1999. In June 1999, FASB issued Statement 137 which defers the effective date to fiscal years beginning after June 15, 2000. A company may also implement the Statement as of the beginning of any fiscal quarter after issuance. Statement 133 cannot be applied retroactively. Statement 133 must be applied to (a) derivative instruments and (b) certain derivative instruments embedded in hybrid contracts that were issued, acquired or substantively modified after December 31, 1997 (and, at the company's election, before January 1, 1998). We believe the impact on our financial statements of adopting Statement 133 will be immaterial.

In December 1999, the SEC issued Staff Accounting Bulletin ("SAB") 101, "Revenue Recognition," which outlines the basic criteria that must be met to recognize revenue and provides guidance for presentation of revenue and for disclosure related to revenue recognition policies in financial statements filed with the SEC. There was no impact on our current financial statements as a result of adopting this interpretation.

In March 2000, the FASB issued Interpretation No. 44 ("FIN 44"), "Accounting for Certain Transactions Involving Stock Compensation—an Interpretation of APB Opinion No. 25". This interpretation clarifies (a) the definition of employee for purposes of applying Opinion 25, (b) the criteria for determining whether a plan qualifies as a noncompensatory plan, (c) the accounting consequence of various modifications to the terms of a previously fixed stock option or award, and (d) the accounting for an exchange of stock compensation awards in

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED STATEMENTS—(Continued)**

a business combination. This interpretation is effective July 1, 2000, but certain conclusions in this interpretation cover specific events that occur after either December 15, 1998, or January 12, 2000. To the extent that this interpretation covers events occurring during the period after December 15, 1998, or January 12, 2000, but before the effective date of July 1, 2000, the effects of applying this interpretation are recognized on a prospective basis from July 1, 2000. There was no impact on our current financial statements as a result of adopting FIN 44. We believe the future impact on our financial statements as a result of this interpretation will be immaterial.

## OFFICERS, DIRECTORS AND FOUNDERS

### Board of Directors

Gregory J. Yurek, Ph.D.  
President, Chief Executive Officer and  
Chairman of the Board

Albert J. Baciocco, Jr.  
Vice Admiral, U.S. Navy (Retired)  
President, The Baciocco Group, Inc.

Colonel Frank Borman  
President, Patlex Corporation

Clayton M. Christensen  
Professor of Business Administration,  
Harvard Business School

Peter O. Crisp  
Vice Chairman,  
Rockefeller Financial Services, Inc.

Richard Drouin, O.C., Q.C.  
Partner, McCarthy Tétrault  
Former Chairman and Chief Executive Officer,  
Hydro-Québec

Gérard Menjon  
Executive Vice President  
Head of Research & Development Division,  
Electricité de France

Andrew G.C. Sage, II  
President, Sage Capital Corporation

John B. Vander Sande, Ph.D.  
Cecil and Ida Green Distinguished Professor  
Department of Materials Science and Engineering  
Director, Cambridge-MIT Institute  
Massachusetts Institute of Technology

### Executive Officers

Gregory J. Yurek, Ph.D.  
President, Chief Executive Officer and  
Chairman of the Board

Roland E. Lefebvre  
Executive Vice President and  
Chief Operating Officer

Alexis P. Malozemoff, Ph.D.  
Senior Vice President and  
Chief Technical Officer

Stanley D. Piekos  
Senior Vice President, Corporate Development,  
Chief Financial Officer, and Secretary

Thomas M. Rosa  
Chief Accounting Officer, Corporate Controller,  
And Assistant Secretary

### Founders

Yet-Ming Chiang, Ph.D.  
Kyocera, Professor of Ceramics  
Department of Materials Science  
Massachusetts Institute of Technology

David A. Rudman, Ph.D.  
Project Leader  
Electro Magnetic Technology Division  
National Institute of Technologies and Standards

John B. Vander Sande, Ph.D.  
(see above)

Gregory J. Yurek, Ph.D.  
(see above)

**CORPORATE HEADQUARTERS**

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 Westborough, MA 01581-1727  
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HTS Technologies Manufacturing Facility  
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 Devens, MA 01432  
 Phone: (508) 836-4200

Power Quality and Reliability Business  
 2114 Eagle Drive  
 Middleton, WI 53562-2250  
 Phone: (608) 831-5773

Power Electronics Business  
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 West Allis, WI 53214  
 Phone: (414) 777-0350

American Superconductor Europe GmbH  
 Rathausstrasse 7  
 41564 Kaarst  
 Germany  
 Phone: 011-49-2131-668735  
 Fax: 011-49-2131-668734

**COMMON STOCK LISTING**

Nasdaq National Market  
 Symbol: AMSC

**PRICE RANGE OF COMMON STOCK**

The quarterly range of high and low sales prices of the company's common stock for fiscal 2000 and 1999 is shown below:

Fiscal 2001	High	Low
Fourth quarter	34 <sup>7</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>4</sub>
Third quarter	55 <sup>15</sup> / <sub>16</sub>	22 <sup>1</sup> / <sub>2</sub>
Second quarter	61 <sup>7</sup> / <sub>8</sub>	30 <sup>3</sup> / <sub>8</sub>
First quarter	51	19 <sup>5</sup> / <sub>8</sub>

Fiscal 2000	High	Low
Fourth quarter	75 <sup>1</sup> / <sub>8</sub>	25 <sup>13</sup> / <sub>16</sub>
Third quarter	28 <sup>7</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>2</sub>
Second quarter	16 <sup>3</sup> / <sub>4</sub>	11 <sup>13</sup> / <sub>16</sub>
First quarter	15 <sup>11</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>

**ANNUAL MEETING**

The annual meeting of stockholders will be held at 9:00 a.m. on Friday, July 27, 2001 at American Superconductor Corporation headquarters.

**TRANSFER AGENT AND REGISTRAR**

American Stock Transfer & Trust Company  
 40 Wall Street  
 New York, NY 11219  
 (800) 937-5449

The transfer agent is responsible for handling shareholder questions regarding lost certificates, address changes, changes of ownership or name in which shares are held. As of June 8, 2001 there were 595 holders of record of common stock.

**LEGAL COUNSEL**

Hale and Dorr LLP  
 60 State Street  
 Boston, MA 02109

**AUDITORS**

PricewaterhouseCoopers LLP  
 One Post Office Square  
 Boston, MA 02109

**FORM 10-K**

The text of the company's annual report on form 10-K for the fiscal year ended March 31, 2001, as filed with the Securities and Exchange Commission, is included herein.

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Any statements in this annual report that relate to future expectations or events — including statements regarding development, manufacturing and commercialization dates and benchmarks, and other statements containing words such as "plans," "expects," "anticipates" and "intends" — constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. There are a number of important factors that could cause actual results to differ materially from those suggested by these forward looking statements. Please refer to the "Future Operating Results" section of the company's annual report on form 10-K, included as a part of this annual report, for a discussion of such factors.





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