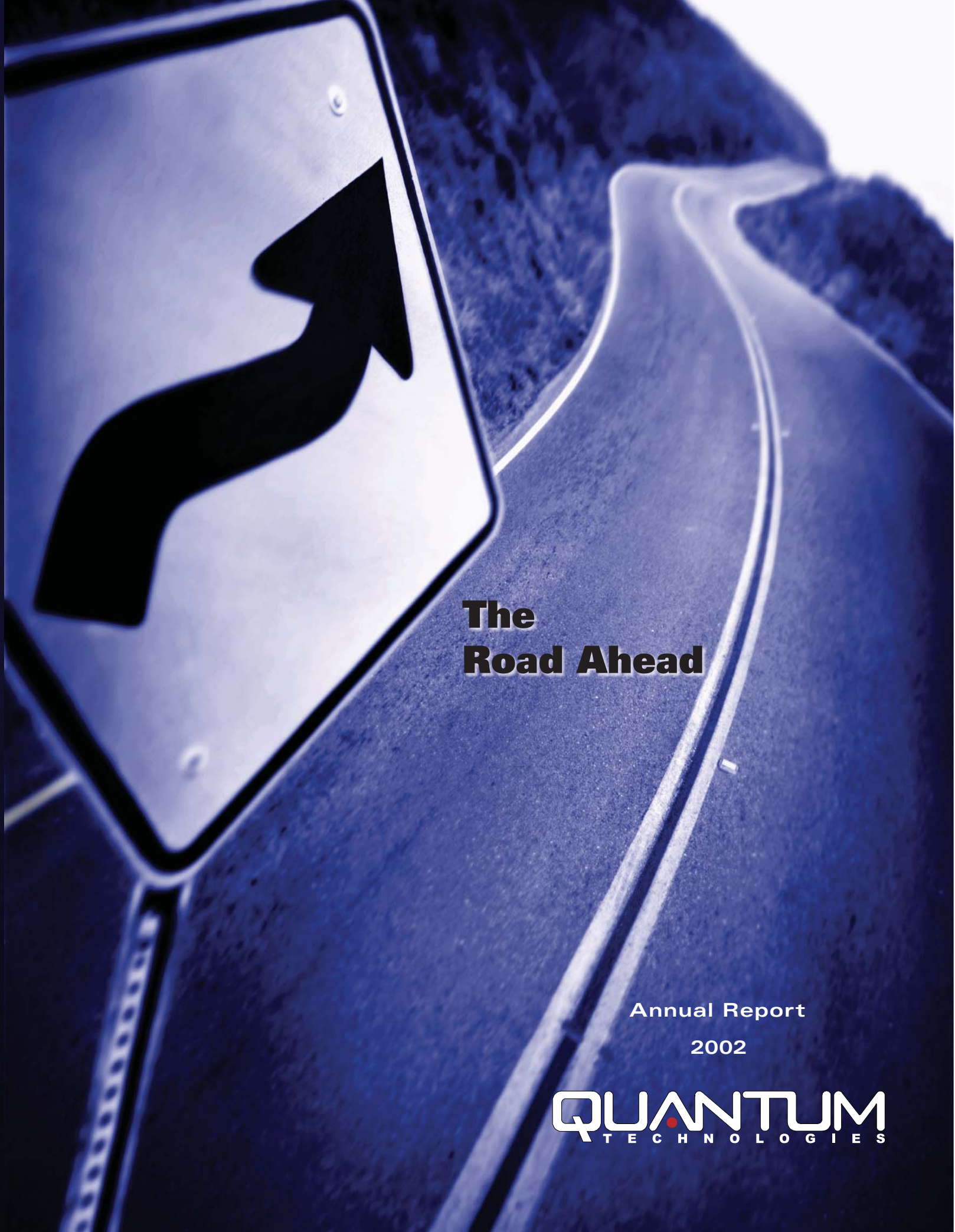
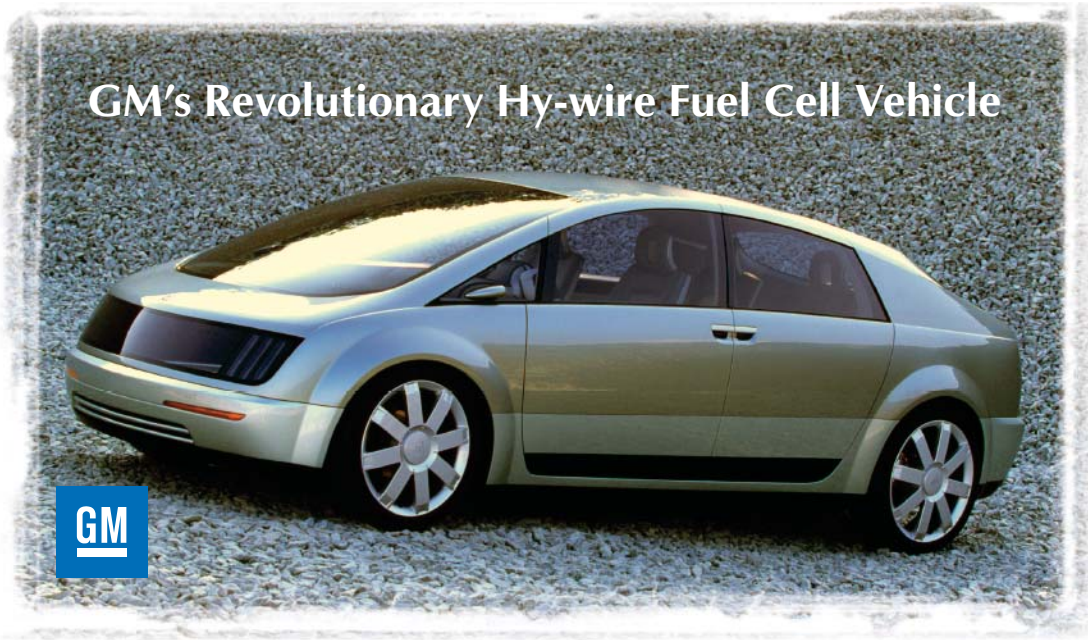


The Road Ahead

Annual Report

2002

QUANTUM TECHNOLOGIES



The GM-Quantum Fuel Cell Alliance went into effect July 2002.

- *The alliance members codevelop fuel cell enabling technologies and markets*
- *The alliance members bring fuel cell applications to market faster*
- *Quantum gains access to other GM alliances and technologies*
- *Quantum gains access to global distribution channels and supply chains*
- *GM becomes QUANTUM's largest shareholder with a 19.9% equity position*

QUANTUM's Other Market Opportunities

QUANTUM
TECHNOLOGIES

Company Overview

We design, manufacture, and supply integrated high tech fuel systems to original equipment manufacturers (OEMs) of fuel cell applications and alternative fueled vehicles. These fuel cell applications include transportation and industrial vehicles, and stationary and portable power generation. Alternative fuel vehicles include cars, trucks, and buses powered by internal combustion engines that operate primarily on natural gas or propane. Our advanced fuel systems comprise the storage, metering, control and injection of gaseous fuels to improve efficiency, enhance power output, and optimize pollutant emissions from fuel cell systems and internal combustion engines. Our fuel systems enable fuel cells and internal combustion engines to operate on hydrogen, natural gas or propane.

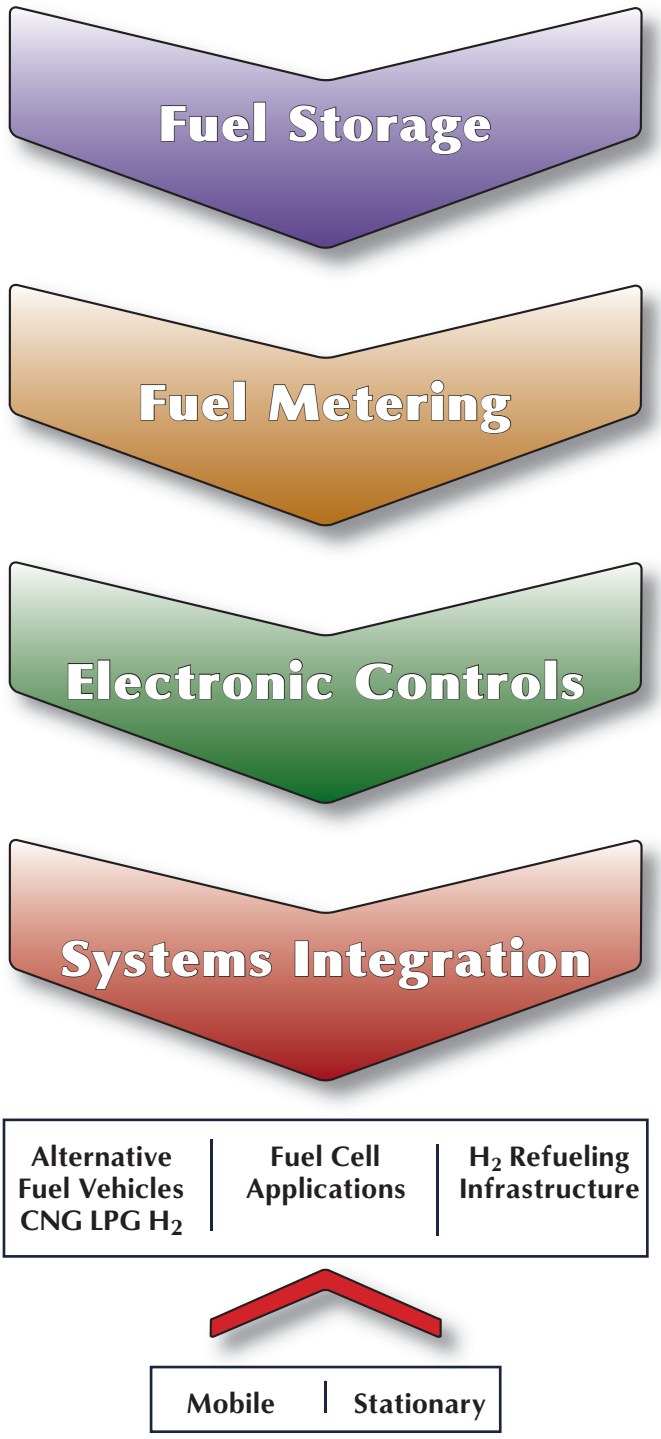
Our integrated gaseous fuel systems are based on the following core competencies:

Fuel Storage
Advanced composite, ultra-lightweight tanks designed and manufactured by Quantum provide cost-effective storage of large quantities of hydrogen or natural gas.

Fuel Metering
Pressure regulators, fuel injectors, flow control valves, and other components designed and manufactured by Quantum control the pressure and flow of gaseous fuels.

Electronic Controls
Solid-state components and proprietary software designed, developed and manufactured by Quantum monitor and optimize fuel pressure and flow to meet manufacturers' fuel cell or internal combustion engine requirements.

Systems Integration
Engineering design services efficiently package and optimize the performance and safety of gaseous fuel storage, metering and electronic control components.



Letter To the Shareholders

Dear Shareholder:

This past year proved to be an exciting one for Quantum. We completed our spin-off from Impco Technologies in July 2002, which consummated our strategic position in General Motor's Global Fuel Cell Alliance, from which we are already seeing benefits. Our financial performance improved dramatically toward the end of fiscal year 2002 with further improvements reported in the first quarter of fiscal year 2003. We anticipate further reductions in cash used in operations and have solidified our focus on reaching near-term profitability. Over the last year, we cultivated 12 new customer relationships, primarily in the area of hydrogen fuel systems for fuel cell applications. We are expanding our opportunities relating to fuel cell applications and continuing to strengthen our technology leadership position. We are proud of our accomplishments and are excited by the opportunities that lie ahead of us.

Spin-off Completed July 2002

The spin-off was completed in July 2002. We believe that our separation from IMPCO gives us improved access to the capital markets and allows our management team to focus on hydrogen fuel systems development and other opportunities with vehicle manufacturers in the OEM alternative fuel market. We continue our relationship with Impco in the form of a strategic alliance. This will provide us access to Impco's global distribution network for our advanced technologies, such as tanks and injectors, for use in Impco's vast transportation, bus, truck and industrial markets. Immediately following the spin-off, General Motors became Quantum's largest shareholder, with a 19.9% equity stake.

General Motors / Quantum Strategic Fuel Cell System Alliance

The spin-off set our strategic alliance with General Motors in motion. We believe that this strategic alliance will advance and commercialize the integration of our hydrogen storage and handling systems into fuel cell applications. GM is promoting us as their recommended provider of storage and handling systems. We have already derived benefits from the alliance, as evidenced by our recent announcement with Suzuki, a GM affiliate, in which we will supply our proprietary hydrogen fuel storage and regulation systems for Suzuki's fuel cell vehicles. We have also gained access to other GM's alliances, technologies, distribution channels, and supply chains. GM's Global Fuel Cell Alliance is focused on commercialization of fuel cell products. Other industry leaders joining Quantum in the alliance include: Giner Electrochemical Systems, Hydrogenics Corporation, and General Hydrogen Corporation.

Financial Focus: Reaching Profitability

Our financial focus is to reach profitability within the next two years. Important components of this focus include our existing alternative fuel business, which generated over $15 million in natural gas and propane product sales during fiscal year 2002, and our growing hydrogen storage and handling business for fuel cell applications. We have alternative fuel systems development and production programs with General Motors through 2006. We will soon recognize additional product revenues from other OEM customers. The margins on the fiscal 2002 product sales were disappointing, but have improved in the first quarter of fiscal year 2003 due to improved pricing arrangements. We anticipate additional improvements in product margins as we streamline our operations and realize economies of scale on production.

We experienced an increase in fuel cell related projects including hydrogen storage, and metering related contracts over the last three fiscal quarters. These programs are advancing rapidly, and we expect to be in production on certain programs within the next two years.

We made some very difficult decisions last year in order to reduce cash used in operations. We made significant staff reductions and consolidated facilities while refocusing our resources to minimize the impact on customers programs. Additionally, we secured outside funding to offset internal spending on research and development. We also initiated contract services to provide for full utilization of testing equipment and facilities. Furthermore, we are transitioning from the pre-production phase to the commercialization phase of our core technologies, which inherently requires fewer research and development dollars.

We continue to focus on managing our cash position through cost controls and increased efforts to grow contract and product revenues, both of which are critical elements to reach profitability.

Growing OEM Customer Base	General Motors remains our largest customer, and our strategic alliance enhances this relationship. The alliance allows us to cultivate new relationships with other vehicle manufacturers. Over the last 12 months, we added several new customers. Some of these companies include: BMW, Ford, Opel, Suzuki, and Toyota. We have also expanded our customer base in new markets including stationary power generation, aerospace, and contract services. We expect our customer base to continue growing as we advance our technologies and commercialize additional products and fuel systems.
Opportunities in Fuel Cell Applications	We believe the market for our fuel cell enabling technologies will develop within the next few years. Fuel cell vehicle application engineering is advancing at rates unexpected six months ago and we anticipate vehicle product sales to develop during fiscal 2003. We expect to realize small production volume levels during 2004 that will have a positive impact on our financial performance. We also believe that the commercialization of stationary fuel cells for power generation, applications and hydrogen refueling technologies will precede the volume production of fuel cell vehicles. We have already diversified into these application areas with customers such as: Hydrogenics (fuel cell stationary power generation), AeroVironment/NASA (fuel cell unmanned flying wing), and General Motors (refueling technologies).
Technology Leader	Our advanced hydrogen fuel storage and delivery system technologies were recently showcased on General Motors' revolutionary Hy-wire fuel cell platform, the world's first drivable fuel cell and by-wire vehicle. We developed these technologies and other engineering competencies by serving vehicle manufacturers in the alternative fuel industry since the early 1990s. Because hydrogen is similar to other alternative fuels familiar to Quantum, the modification of our technologies and competencies for the fuel cell market has been an evolutionary process. We believe our existing proprietary and patented technology base, coupled with our systems integration expertise, gives us a significant advantage in the fuel cell market.

The year 2002 is noted as a new beginning for Quantum. Our technologies and competencies were built over many years, providing us a solid foundation and deep technological heritage. We now start anew with a focused business plan, which we are beginning to execute.

Our new beginning has created a heightened sense of excitement among us here at Quantum, and we are energized by the potential we have to offer to our shareholders, customers and employees. We embrace the challenges that lie ahead, as we strive to continue to increase our customer base, strengthen our technology leadership position and focus on profitability. We are looking forward to our first year of operations as a stand-alone company, and we are confident that our successes to date will set the stage not only for our first year, but also for many years into the future.

Sincerely,

Alan Niedzwiecki
President and Chief Executive Officer

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended April 30, 2002

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

For the transition period from _____ to _____

Commission File No. 0-49629

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**33-0933072**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification Number)**

17872 Cartwright Road, Irvine, CA 92614
(Address of principal executive offices, including zip code)

(949) 399-4500
(Registrant's telephone number, including area code)

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

None

(Title of each class) **(Name of exchange on which registered)**

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

Common Stock, $0.001 par value per share

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. ☐

The aggregate market value of the Common Stock held by non-affiliates of the Registrant as of July 26, 2002 was approximately $ 61,344,611, based upon the closing sale price of the Registrant's Common Stock on such date, as reported on the Nasdaq National Market. Shares of Common Stock held by each executive officer and director and each person owning more than 5% of the outstanding Common Stock of the Registrant have been excluded in that such persons may be deemed to be affiliates of the Registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of July 26, 2002, the Registrant had outstanding 14,142,036 shares of Common Stock, $.001 par value per share, and 3,513,439 shares of Series A Common Stock, $.001 par value per share.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties. These forward-looking statements are not historical facts but rather are based on current expectations, estimates and projections about our industry, our beliefs and assumptions. We use words such as "anticipate," "expect," "intend," "plan," "believe," "seek," "estimate" and variations of these words and similar expressions to identify forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, some of which are beyond our control, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. These risks and uncertainties include those described in "Risk Factors" and elsewhere in this Annual Report. You should not place undue reliance on these forward-looking statements, which reflect our view only as of the date of this Annual Report.

PART I

Item 1. *Business.*

Overview

We design, manufacture and supply integrated fuel systems to original equipment manufacturers (OEMs) of fuel cell applications and alternative fuel OEM vehicles. These fuel cell applications include transportation and industrial vehicles, stationary power generation and portable power generation. Alternative fuel OEM vehicles include cars, trucks and buses powered by internal combustion engines that operate primarily on natural gas or propane. Our advanced fuel systems comprise the storage, monitoring, control and injection of gaseous fuels to improve efficiency, enhance power output, and reduce pollutant emissions from fuel cell systems and internal combustion engines. Our fuel systems enable fuel cells and internal combustion engines to operate on hydrogen, natural gas or propane.

We supply our advanced gaseous fuel systems for alternative fuel vehicle applications to OEM customers for use by consumers and commercial and governments fleets. Since 1997, we have sold over 14,000 fuel systems for alternative fuel vehicle applications, primarily to General Motors. General Motors has sold substantially all of these vehicles to its customers. We also provide our integrated gaseous fuel systems for fuel cell applications to major OEMs through funded research and development contracts and on a prototype basis. These products are not currently used on a commercial basis and will require additional product development over the next five years. Additionally, we believe that these systems will reach production volumes only if OEMs produce fuel cell applications using our systems on a commercial basis. We believe that a commercial market for our fuel cell enabling technologies will develop beginning in 2004 to 2005.

A number of automotive, industrial and power generation manufacturers are developing alternative clean power systems using fuel cells or clean burning gaseous fuels, which decrease fuel costs, lessen dependence on crude oil and reduce harmful emissions. We offer the following to enable the development and commercialization of these systems:

- *fuel-storage*—advanced composite, ultra-lightweight tanks that provide cost-effective storage of large quantities of hydrogen or natural gas;
- *fuel delivery*—pressure regulators, fuel injectors, flow control valves, and other components designed to control the pressure, flow and metering of gaseous fuels;
- *electronic controls*—solid-state components and proprietary software that monitor and optimize fuel pressure and flow to meet manufacturers' fuel cell or engine requirements; and
- *systems integration*—services to integrate gaseous fuel storage, delivery and electronic control components to meet OEM requirements.

We believe that the market for our fuel cell enabling technologies will develop over the next 3-5 years in conjunction with the expected commercialization of fuel cells. We plan to continue the development of our fuel cell enabling technologies to meet this commercialization in 2004. We believe that the commercialization of stationary fuel cells for residential, emergency back-up, and uninterruptible power supply (UPS) applications will precede the volume production of fuel cell vehicles. We plan to focus our fuel cell enabling technology marketing efforts on North America, Europe, and Asia-Pacific. The current market for our integrated gaseous fuel systems is the expanding global market for OEM natural gas and propane vehicles. Based on the size and growth rate for alternative fuel vehicles across the globe, we have focused our marketing efforts in Asia-Pacific, Europe, South America, and North America.

We continually survey and evaluate the benefits of joint ventures, acquisitions and strategic alliances with our customers and other participants in the alternative fuel vehicle industry and emerging fuel cell industry to strengthen our global business position. We have focused our strategic alliances on expanding our market opportunities and advancing the development of our technologies. We currently have strategic marketing alliances with IMPCO Technologies, Inc., our former parent company, and General Motors. We have technology development alliances with General Motors and ATK Thiokol Propulsion focused on the development of enabling technologies for hydrogen fuel cell vehicles.

We were incorporated in Delaware in October 2000 as a wholly-owned subsidiary of IMPCO. On July 23, 2002, IMPCO distributed to its stockholders, on a pro-rata basis, all of the shares of our common stock owned by IMPCO. In the distribution, IMPCO stockholders received one share of our common stock for each share of IMPCO common stock owned as of July 5, 2002, the record date for the distribution. Immediately prior to the distribution, IMPCO transferred to us substantially all of the operations, assets and liabilities constituting IMPCO's automotive OEM business, which had been operated by IMPCO as its Quantum division.

On July 24, 2002, we issued to General Motors an aggregate of 3,513,439 shares of our Series A common stock, representing 19.9% of our total outstanding equity following such issuance, for consideration of a nominal cash contribution and access to certain General Motors' proprietary information. Our strategic alliance with General Motors became effective at the same time. Under the alliance, we have committed to provide minimum amounts of annual funding to projects approved under the alliance. Each party will retain the ownership of its existing technology and will jointly own technology that is jointly created under the alliance. We will be free to use jointly created technologies in certain aspects of our business but will be required to share revenues with General Motors on fuel cell system-related products that are sold to General Motors or third parties.

Business Strategy

Our business strategy is to take advantage of current opportunities in the rapidly expanding international market for natural gas and propane vehicles while also advancing our fuel cell enabling technologies. Our objective is to be the leading developer and supplier of integrated systems that store gaseous fuels and monitor and control the pressure and flow of those fuels for fuel cells and internal combustion engines. Our strategy for achieving this objective includes the following elements:

Provide Fuel Systems to the Stationary Fuel Cell Power Generation Market. We plan to address demand for stationary fuel cell applications by continuing to work with fuel cell manufacturers to develop and supply integrated fuel systems for their stationary and portable power generation applications. We believe that the commercialization of stationary fuel cells for residential, emergency back-up, and uninterruptible power supply applications will precede the volume production of fuel cell vehicles. Several fuel cell manufacturers have announced intentions of introducing stationary fuel cell products between 2002 and 2005.

Develop and Supply Integrated Fuel Systems for Fuel Cell Vehicle Applications. We will continue to develop our fuel cell enabling technologies to assist fuel cell OEMs to expedite the commercialization of vehicle

applications. We intend to leverage our systems integration expertise in OEM alternative fuel vehicle applications and apply that experience in the emerging fuel cell vehicle market. Most of the major OEM automotive manufacturers have announced intentions to introduce fuel cell vehicles beginning in 2004 to 2005. We will focus our fuel cell enabling technology business development priorities in North America, Europe and Asia-Pacific.

Focus Research and Development on Fuel Cell Enabling Technologies. We intend to focus our research and development efforts on advancing our fuel cell enabling technologies and systems to succeeding generations to further improve performance and reduce cost. We plan to continue to expand our research and development in fuel storage, fuel delivery and electronic control systems for fuel cells. We will actively seek to establish joint development programs and strategic alliances with the major fuel cell developers and industry leaders in these markets. For example, under our alliance with General Motors, we will co-develop technologies that will aid in the more rapid commercialization of fuel cell applications.

Expand Participation in the Development of Industry Standards. Members of our management team have served on the boards of key fuel cell and alternative fuel vehicle industry organizations, including California Hydrogen Business Council, CalStart/Weststart, National Hydrogen Association, Natural Gas Vehicle Coalition and U.S. Fuel Cell Council. Codes and standards cover the safety aspects of fuel cell systems in vehicle, test procedures to establish the performance of the system/components, and interface requirements. We plan to expand our participation in national and international organizations that can influence international standard setting organizations for alternative fuel vehicles, fuel cell applications, and related supporting infrastructure. We will focus our involvement in these organizations to promote standards that are performance-based and consistent with and inclusive of our technologies.

Increase our Participation in the Alternative Fuel OEM Vehicle Markets. We plan to leverage our technology and systems integration capabilities in the OEM alternative fuel vehicle markets to expand our customer base and enter new OEM markets. We believe that significant opportunities for growth exist in international markets. Based on the size and projected growth rate for alternative fuel vehicles across the globe, we have prioritized our business development efforts in Asia-Pacific, Europe, South America and North America.

Business Operations

Overview. We develop and manufacture cost-effective and efficient gaseous fuel storage, fuel delivery and electronic control systems for OEM passenger and fleet vehicles. We also target the emerging fuel cell industry, which includes the transportation, industrial vehicle, and stationary and portable power generation markets, and the hydrogen-refueling infrastructure to be developed to support fuel cell vehicles. Our capabilities include the following:

- research and development;
- application engineering and validation;
- fuel cell power system controls and validation;
- hydrogen and compressed natural gas fuel storage and testing;
- testing procedures to meet different global regulations and emission control standards;
- fuel control devices and technology for gaseous fuels and other gases for use in internal combustion engines, fuel cells and other applications requiring metering of gases; and
- manufacturing.

Products. Our core products include gaseous fuel storage, fuel delivery and electronic controls for OEM alternative fuel vehicles and fuel cell systems used in the transportation, stationary power generation and portable

power markets. We continue to improve our products and develop new systems to meet increasingly stringent vehicle operational and durability requirements in automotive OEM fuel cell powered vehicles. We also are developing improved system technologies using injectors, high-and low-pressure regulators, on-board diagnostics, high-performance fuel system control modules, fuel lock-offs and related components for application in the stationary and portable power generation fuel cell markets. We design and manufacture computerized controls, regulators and automatic shut-off equipment, and lightweight, high-pressure hydrogen and natural gas storage tanks using our TriShield technology.

We classify the stages of our product development in the following categories:

- research & development;
- prototype;
- pre-production prototype; and
- production ready.

Our fuel storage products include cylindrical and conformable tanks. We provide lightweight, all-composite storage tank technologies for compressed hydrogen. The lightweight nature of the tank, coupled with high hydrogen mass by volume, improves the range of hydrogen-powered fuel cell vehicles. Our conformable tank maximizes hydrogen storage in a given space, optimizing the volume of hydrogen stored on board. We expect that the remaining product development costs for these products will be approximately $20 to $25 million. The following table describes the features and production stages of our storage products:

Products	Features/Production Stage
TriShield All-Composite Storage Tanks	• Designed for safety, lightweight and cost-effectiveness • Exceeds current regulatory qualification requirements and also meets OEMs more stringent requirements for use in natural gas fueled vehicles • Provides 30% more fuel capacity than comparably sized aluminum tanks, and lower cost than steel tanks • The all-composite liner technology acts as a permeation barrier for stored fuel and reduces the possibility of hydrogen embrittlement often present with aluminum or steel liners in the presence of hydrogen • Production ready for compressed natural gas; production ready for hydrogen in approximately 2003 to 2004
Conformable Storage Tanks	• Designed for safety, lightweight and storage efficiency • Optimal packaging solution • Prototype stage; production ready for hydrogen in approximately 2005 to 2007

Our fuel delivery products consist of regulators, injectors and valves. We have designed our patented in-tank regulator for use with hydrogen for fuel cell applications. Our design provides greater safety by eliminating the

need for high-pressure fuel lines outside of the fuel storage tank. The unit is also cost-effective because it incorporates the features of many independent components, thereby eliminating the need to install several separate components. We have designed our patented fuel injector for use with dry gases such as hydrogen. Our fuel injector is capable of handling the high flow rates needed in automotive OEM applications, while offering superior durability, longer life, less noise and lower cost. This component also allows for very precise metering of fuel, which is critical to optimize a fuel cell system. We expect that the remaining product development costs for these products will be approximately $5 million. The following table describes the features of our fuel delivery products:

Products	Features/Production Stage
In-Tank Regulators	• Reduces the pressure of the fuel stored in the tank at the tank outlet, eliminating the need for high-pressure fuel lines running throughout the system • Increased safety • Significant cost reductions versus competitive products • Prototype stage; production ready for compressed natural gas and hydrogen in approximately 2003 to 2004
Gaseous Fuel Disc Injectors	• Designed specifically for precise gaseous fuel metering to provide superior flow rate and increased durability over existing plunger technologies • Generally translates into lower costs than competing technologies • Prototype stage; production ready for compressed natural gas and propane in 2002 and for hydrogen in 2004 • Production ready for compressed natural gas; production ready for hydrogen in approximately 2004
Injector Pressure Regulators	• Provides precise control of fuel required for injection systems in fuel cell applications • Production ready for compressed natural gas; production ready for hydrogen in approximately 2004
Gas Mass Sensors/ Mixture Control Valves	• Measures and controls gaseous fuel and airflow, a critical step in the optimization of fuel cell systems • Production for compressed natural gas commenced in 1997
Fuel Shut-off Products	• Mechanically or electronically shuts off fuel flow to the system when fuel leakage occurs or when the system is turned off • Production for compressed natural gas commenced in 1997

Our electronic control products range from 8 to 32-bit architecture. These units precisely control the flow and pressure of gaseous fuels, such as hydrogen, and other gases, such as air. We currently use these electronic controls, coupled with our proprietary software, to optimize fuel pressure and flow management for fuel cell applications. We believe, however, that there are numerous other potential applications for these controls. We expect that the remaining product development costs for these products will be approximately $5 million. The following table describes the features of our electronic controls and software products:

Products	Features/Production Stage
Electronic Controls and Proprietary Software	• Manages flow of fuel and air in fuel cell systems to improve optimization of overall system • Provides closed-loop system control • Proprietary designs, software and calibration tools to develop, calibrate and optimize fuel cell control systems • Sensors, actuators and controllers specific to our customers' needs and specifications • Production for compressed natural gas commenced in 1997; production ready for hydrogen in approximately 2004

Services. We provide services in the areas of design, development, validation, certification, manufacture and after-sales service support. We provide our customers with the following services to support their programs for transportation, and stationary and portable power generation applications:

- *Systems Integration*. We integrate our gaseous fuel storage, fuel delivery and electronic control components and systems into fuel cell engine applications in the transportation, stationary power and portable power industries. We also provide rapid prototyping techniques, which accelerate the iterative design process and result in a more accurate design.
- *Testing and Validation*. To increase the likelihood of high success rates at the system level, we perform component, subsystem and system testing and validation. These procedures must satisfy our own internal requirements, customer-specific requirements and industry standards. If no suitable procedures exist, we generate requirements for the customer.
- *Certification and Compliance*. Our regulatory and certification engineers implement the latest emissions and safety regulations to ensure the proper certification and ongoing compliance of our products and our business.
- *System Level Assembly*. We develop and manage the assembly process for integration of our systems into end products at our facility or at our customers' facilities.
- *Training*. We develop comprehensive technical training for our customers that sell and service our products as well as for our customers that use our products.
- *Service and Warranty*. We have extensive capabilities in developing service procedures and programs for OEMs. We also provide technical support over the telephone or at customer sites to resolve technical issues.

Sales and Distribution. We derive revenue from alternative fuel and fuel cell development contracts with OEMs, government contracts focused on fuel cell and alternative fuel research and the sale of our alternative fuel products for use in alternative fuel vehicles manufactured by General Motors and other OEMs. Through our Teaming Agreement with General Motors, we sell our jointly developed alternative fuel systems and components to General Motors. Through our strategic alliance with General Motors, we will be a recommended provider to

General Motors of hydrogen storage, hydrogen handling and associated electronic controls for fuel cell system applications. We rely on our sales force and strategic partners to sell our products and services, develop new customers and consummate joint application development programs with leading OEMs in the target alternative fuel vehicle and fuel cell markets of transportation as well as stationary and portable power generation.

Manufacturing. Our manufacturing activities currently include assembly, system installation and tank manufacturing. We assemble the majority of our components at our facility in Irvine, California, but outsource the assembly of complex electronic components and select key suppliers for certain components of developed fuel systems. Our vendor and service provider supply base is highly diversified. None of our suppliers represents more than 10% of our raw material purchases. Complete systems are installed on vehicles at the OEM manufacturing facility or at third-party equipping sites. The criteria for the establishment of a site are proximity to vehicle manufacturing and delivery points.

Our operations are QS-9000 certified, with the exception of our Sterling Heights, Michigan facilities. Our Sterling Heights facility is scheduled to be audited for QS-9000 certification before the end of the 2002 calendar year.

Strategic Relationships

We continually survey and evaluate the benefits of joint ventures, acquisitions and strategic alliances with our customers and other participants in the alternative fuel vehicle industry and emerging fuel cell industry to strengthen our global business position. We have focused our strategic alliances on either our marketing strategy or on our development strategy. Our marketing strategy seeks to expand the distribution channels for our advanced fuel system technologies. Our development strategy is to advance the state of technology and its application.

IMPCO. In connection with the distribution, we entered into a Strategic Alliance Agreement with IMPCO pursuant to which we will work with IMPCO in identifying and conducting research and development programs of mutual interest. As part of such research and development activities, we may develop, solely or jointly with IMPCO, technology that is owned solely by us or jointly with IMPCO. The other purpose of this relationship is to provide IMPCO access to our advanced technologies products, including the CNG storage tanks, fuel injectors, in-tank regulators and other products, for use in automotive, bus and truck and industrial aftermarket applications and in the bus and truck and industrial OEM markets. We believe that this alliance with IMPCO will expedite the commercialization and integration of our advanced gaseous storage and handling systems into broader global alternative fuel markets, including automotive after-market, material handling, internal combustion engine-based stationary and portable power generation, and general industrial markets.

General Motors. Our strategic alliance with General Motors became effective upon the spin-off of Quantum from IMPCO. We believe that the strategic alliance with General Motors will advance and commercialize, on a global basis, the integration of our gaseous storage and handling systems into fuel cell systems used in the transportation markets. Under the alliance, we and General Motors will co-develop technologies that will aid in more rapid commercialization of fuel cell applications. Additionally, General Motors will promote our company throughout the General Motors organization as a recommended provider of hydrogen storage, hydrogen handling and associated electronic controls that meet OEM requirements. This strategic alliance expands upon the relationship that has been in place between General Motors and Quantum (as IMPCO's Automotive OEM Division) since 1993, through which we provide integrated natural gas and propane fuel systems for their alternative fuel vehicle products.

ATK Thiokol Propulsion. In May 2000, we formed a strategic alliance with NASA Space Shuttle rocket booster manufacturer, ATK Thiokol Propulsion to design, develop, manufacture and commercialize hydrogen fuel storage vessels for application in an automotive vehicle system. ATK Thiokol's core competencies include extensive material science knowledge, advanced analytical capabilities and a 1,050-acre test facility. This

alliance provides us access to over 800 ATK Thiokol scientists, engineers and support personnel experienced in the handling and management of hydrogen fuel. We have exclusive rights to several of ATK Thiokol's technologies for commercialization purposes, including its conformable tank technology for the emerging automotive fuel cell markets and nondestructive evaluation technology for testing, and we have exclusive rights to distribute ATK Thiokol products in the North American and European Markets. ATK Thiokol is entitled to receive royalties on certain technologies for products we sell commercially that incorporate ATK's technology.

Substantially all of our revenues for the fiscal year ended April 30, 2002 related to product sales to and development fees from General Motors. Since the beginning of 2001, we have had prototype development projects or programs with the following entities:

Adam Opel AG	ISE Research
AeroVironment	Pinnacle West Capital Corporation
Ford Motor Company	Proton Energy Systems, Inc
General Motors (Global Alternative Propulsion Center)	South Coast Air Quality Management District
Hydrogenics Corporation	Toyota Motor Corporation
Hyundai America Technical Center	U.S. Department of Energy
Hyundai Motor Company	Yamaha Motor Company

We intend to establish similar relationships with other leading industry OEMs by using our systems integration capabilities and our leading technology position in fuel storage, fuel delivery and electronic controls.

Research and Development

We conduct research and development in the following areas, with corresponding technical capabilities:

- *Fuel Storage*. Composite pressure vessel design and analysis, carbon and epoxy filament winding and hydraulic, pneumatic, burst and fatigue testing. Evaluation and development test capabilities for advanced hydrogen storage materials, including hydride, alanates, carbon adsorption and other emerging materials.
- *Electronic Control Systems*. Specialization in hardware design and selection, engine modeling, calibration and software design for engine and emission controls.
- *Mechanical Design and Development*. Specialization in pneumatics, kinematics, hydraulic components and systems and advanced materials, structural, flow and thermal analysis.
- *Advanced Catalysts*. Catalyst synthesis and processing, catalyst and emission testing and fabrication of corona and conventional prototype converters.
- *Advanced Products*. Injectors, compressors and micro machining, including pressure sensors and bi-directional mass flow sensors, fuel management, fuel storage and fuel supplies for fuel cell power systems, mass flow sensors for natural gas measurement and "smart" sensors using 8-bit micro-controllers.
- *Component and Subsystem Test Facilities*. Extended vibrations, shock loads and accelerations, extreme temperature exposure from -85 F to 392 F and thermal shock, cyclic corrosion, extended salt, fog, humidity and dryness cycling, severe acid and alkali corrosion, flow simulations and pneumatic leak checks.

We believe these capabilities are a critical component of our ability to maintain our technology leadership position in fuel cell and alternative fuel enabling systems. We intend to develop and adapt our current technologies and products for use in connection with fuel cells, including the following advanced products:

- *Micro-Machined Mass Flow Sensors*. We have successfully designed, fabricated and tested a micro-machined single and bi-directional mass flow sensor for air and natural gas mass flow measurement and

a micro-machined bi-directional mass flow and concentration sensor. These micro-machined devices may have several applications for fuel cell systems.

- *Continuous Flow Control*. We are working on a variety of fuel metering devices for gaseous fuels that feature continuous flow outputs for use in fuel cell applications.
- *Water Management*. We have expertise to develop integrated systems to provide water vaporization and humidification of gas streams, direct water vapor transfer from humid to dry streams, de-ionized water compatibility, water contamination removal, water pumps and the storage and metering of water for fuel cells.
- *Heat Exchanger and Thermal Management Systems*. We have expertise to develop integrated thermal management systems, including heat transfer components and fluids and HVAC systems.

Competition

In the fuel cell industry, our area of expertise is in hydrogen fuel storage, fuel delivery, electronic controls, and system integration. We do not manufacture fuel cells or fuel reformers. Our principal competition in the fuel cell markets primarily consists of companies developing individual components.

We believe that our competitive advantage for current and potential future competitors is our technology leadership derived from many years of experience with alternative fuels. Our current competitors typically focus on fuel injection and individual components. We believe we are unique in being able to offer complete integrated fuel systems based on our own advanced technologies, including gaseous fuel storage, fuel metering, and electronic controls.

A critical element for fuel cell vehicles and OEM alternative fuel vehicles is fuel storage. The major competitors for high-pressure gaseous storage cylinders include Dynetek Industries Ltd., Lincoln Composites and Structural Composites Inc. Liquid hydrogen, metal hydrides, and on-board liquid fuel reformation may also provide alternatives to high-pressure storage. Companies pursuing these competing technologies include Linde AG, Energy Conversion Devices, which has recently joined forces with Texaco, and ExxonMobil.

An emerging competitor focused on fuel cell system integration, but without its own technologies, was XCELLSiS. Ballard Power Systems recently completed the acquisition of XCELLSiS and Ecostar to become a consolidated fuel cell manufacturer and system integrator.

In the alternative fuel industry, our key competitors in North America for gaseous fuel delivery products in the automotive OEM market include Alternative Fuel Systems, Baytech Corporation, Clean Air Partners, FEV, GFI Control Systems, Inc. and Westport Innovations. In international markets, we compete with aftermarket component and kit manufacturers such as Aisan, Koltec, Landi, Lovato, OMVL, Tartarini and Vialle. In the future, we may also face competition from traditional automotive component suppliers, such as Bosch, Delphi, Siemens and Visteon, and from motor vehicle OEMs that develop fuel systems internally. Many of these potential competitors have been in business longer than us and have substantially greater financial, marketing and development resources than we have.

Product Certification

We must obtain emission compliance certification from the Environmental Protection Agency to introduce vehicles or engines into commerce in the United States, and from the California Air Resources Board to introduce vehicles or engines into commerce in California. Certification requires that each vehicle or engine meet specific component, subsystem and vehicle-level durability, emission, evaporative, and idle tests.

We strive to meet stringent industry standards set by various regulatory bodies and industry practices, including the Department of Transportation and Federal Motor Vehicle Safety Standards, the National Fire

Protection Association, TÜV, Underwriters Laboratories, and American Gas Association. Approvals enhance the acceptability of our products in the domestic marketplace. Many foreign countries also accept these agency approvals as satisfying the "approval for sale" requirements in their markets.

Backlog

As of July 1, 2002, our backlog for our products was approximately $1.7 million. We measure backlog for our product sales from the time orders become irrevocable, which generally occurs 60 days prior to the date of delivery.

Employees

At July 1, 2002, we had 156 full-time employees. We consider our relations with our employees to be good. None of our employees is represented by a collective bargaining agreement.

Intellectual Property

We rely primarily on patent and trade secret laws to protect our intellectual property. In connection with the spin-off, IMPCO transferred six domestic patents, three foreign patents and one patent application to us. These patents will expire between July 2015 and December 2017. Our pending patent applications may not be allowed. Even if they are allowed, these patents may not provide us a competitive advantage. Competitors may successfully challenge the validity and scope of our patents and trademarks.

We also rely on a combination of trademark, trade secret and other intellectual property laws and various contract rights to protect our proprietary rights. However, we do not believe our intellectual property provides significant protection from competition. We believe that patent, copyright, trademark and trade secret protection are less significant and that our growth and future success will be more dependent on factors such as the knowledge and experience of our personnel, new product introductions and continued emphasis on research and development. We believe that establishing and maintaining strong strategic relationships with valued customers and OEMs are the most significant factors protecting us from new competitors.

Item 2. ***Properties.***

Our corporate headquarters is in Irvine, California. We operate research and development facilities in California, Michigan, and Utah. Our research and development facility in Irvine is dedicated to the research and development of systems and technologies that enable the use of gaseous fuels in internal combustion engines and fuel cells. This center conducts research and development of advanced fuel storage, systems for light- and medium-duty OEM alternative fuel vehicles and for fuel cell applications, including transportation, stationary power generation, and portable power generation.

Together with ATK Thiokol, we have established a hydrogen storage cycling testing facility in Utah. We use the facility to perform hydrogen cycling testing through repeated fast-fills on compressed gas storage tanks and subsystems. The fully instrumented fast-filling tests will determine temperature rise and confirm the gas thermodynamics experienced during filling. We need this critical data for the design, manufacture, testing and validation of compressed hydrogen storage tanks. While the initial focus of the testing will be on hydrogen storage and handling for vehicle applications, the facility's testing capabilities apply directly to storage systems for hydrogen refueling stations.

We conduct vehicle development and integration at our facilities located in Lake Forest, California and Sterling Heights, Michigan. We opened these facilities during the 2000 fiscal year. The Advanced Vehicle Concept Center in Lake Forest, California employs 59 engineers and other professionals focused on systems integration, validation and certification for concept, prototype and production vehicles the center additionally

conducts research and development of advanced fuel delivery and electronic control systems for light- and medium-duty OEM alternative OEM fuel vehicles and for fuel cell applications, including transportation, stationary power generation, and portable power generation. Our Sterling Heights, Michigan facility employs 8 engineers and other professionals to assist our OEM customers in the Detroit area, acting as a liaison between us and our customers, performing the following primary functions: program management, vehicle commercialization, production, service, and specialty vehicle assembly management.

We currently lease additional manufacturing, research and development and general office facilities in the following locations set forth below:

Location	Principal Uses	Square Footage
Irvine, California	Corporate offices, manufacturing, R&D and testing	79,000
Lake Forest, California	Design, development and testing	65,000
Sterling Heights, Michigan	Design, development and testing	16,000

We believe our facilities are presently adequate for our current core product manufacturing operations and OEM development programs and production. We anticipate that we will require additional space as we expand our operations in the fuel cell and alternative fuel industries. We believe that we will be able to obtain suitable space as needed on commercially reasonable terms.

Item 3. ***Legal Proceedings.***

Except as set forth below, we are not currently a party to any material legal proceeding. In addition to the proceeding described below, we may from time to time become involved in litigation relating to claims arising in the ordinary course of business. These claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

In August 2000, IMPCO proceeded with legal action in federal court (Eastern District of Michigan, case #00-73633) against GFI Control Systems Inc. and Dynetek Industries Ltd. for patent infringement (U.S. Patent No.6,041,762), which covers a compressed gas fuel system that includes a tank with an internal pressure regulator. GFI Control Systems Inc. led a counter-claim for patent infringement. In connection with the distribution, IMPCO assigned to us all of its rights under this litigation. We intend to vigorously enforce our intellectual property rights.

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

No matters were submitted to a vote of security holders in the fourth quarter of our 2002 fiscal year.

PART II

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

Our common stock began regular-way trading on the Nasdaq National Market under the symbol "QTWW" on July 24, 2002. Prior to the distribution, our common stock traded on a "when-issued" basis from July 11, 2002 to July 23, 2002. On July 26, 2002, the last reported sale price for our common stock as reported on the Nasdaq National Market was $4.38 per share. As of July 24, 2002, there were approximately 519 stockholders of record of our common stock and one stockholder of record of our Series A common stock.

Dividend Policy

We do not anticipate paying any dividends on our common stock in the foreseeable future because we expect to retain our future earnings for use in the operation and expansion of our business. Our payment and amount of dividends, however, will be subject to the discretion of our board of directors and will depend, among other things, upon our results of operations, financial condition, cash requirements, future prospects and other factors which may be considered relevant by our board of directors.

Sales of Unregistered Securities

On February 11, 2002, we issued 1,000 shares of our common stock to IMPCO for an aggregate purchase price of $100. The issuance was exempt from registration under the Securities Act of 1933, as amended, pursuant to Section 4(2) thereof and Regulation D promulgated thereunder, as such issuance did not involve a public offering of securities.

Item 6. ***Selected Financial Data*.**

SELECTED FINANCIAL DATA

The following table summarizes certain historical financial and pro forma financial information and is qualified in its entirety by reference to, and should be read in conjunction with, our historical financial statements and related notes and other financial information included herein. The historical financial data for the year ended April 30, 1998 have been derived from our unaudited financial statements, which are not included in this Annual Report. The historical financial data for the years ended April 30, 1999, 2000, 2001 and 2002 have been derived from our audited financial statements. The unaudited pro forma financial statements were prepared as if the spin-off from IMPCO had occurred as of April 30, 2002 for the unaudited pro forma condensed balance sheet and as of May 1, 2001 for the unaudited pro forma condensed statements of operations. Historical financial information may not be indicative of our future performance as an independent company. The selected financial data should be read in conjunction with the "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Unaudited Pro Forma Financial Data" and the financial statements and notes thereto included elsewhere in this Annual Report.

	Year Ended April 30,					Proforma Fiscal Year Ended April 30, 2002 (1)
	1998	1999	2000	2001	2002	
	(unaudited)					(unaudited)
Statement of Operations Data:						
Net revenue:						
Product sales	$ 3,718	$ 13,456	$ 13,057	$ 15,447	$ 15,458	$ 15,458
Contract revenue	8,610	11,013	9,284	7,911	7,945	7,945
Total revenue	12,328	24,469	22,341	23,358	23,403	23,403
Cost and expenses:						
Cost of product sales	4,811	15,347	15,081	19,452	25,581	25,581
Research and development	10,889	8,902	12,956	26,687	32,657	32,657
Selling, general and administrative	3,439	3,713	4,939	7,459	8,063	9,463
Operating loss	(6,811)	(3,493)	(10,635)	(30,240)	(42,898)	(44,298)
Interest expense	—	—	—	4	489	489
Other income	—	—	—	—	10	10
Provision for Income Tax	—	—	—	—	1	1
Net loss	(6,811)	(3,493)	(10,635)	(30,244)	(43,378)	(44,778)
Pro forma basic and diluted loss per share (unaudited)						(2.54)
Balance Sheet Data:						
Cash	$ 0	$ 0	$ 2	$ 4	$ 177	15,181
Working capital	3,177	11,545	14,364	11,338	(3,375)	20,253
Total assets	7,646	18,597	23,399	32,815	28,159	57,163
Long-term obligations, less current portion	—	—	—	183	127	127
Equity	6,794	115,866	19,357	23,992	10,271	47,899

(1) The unaudited pro forma statement of operations and balance sheet data give effect to:

- our issuance to IMPCO of 14,141,036 additional shares of our common stock prior to the distribution;
- IMPCO's transfer to us of assets and $15 million in cash and the assumption by IMPCO of $8.6 million of our outstanding debt;

- the distribution by IMPCO to its stockholders of 14,142,036 shares of our common stock held by IMPCO;
- the conversion of invested equity into stockholders' equity; and
- the issuance of 3,513,439 shares of our Series A common stock to General Motors, which has been presented at its estimated fair market value on the date of distribution of approximately $14 million and is subject to a final determination of market value. The amortization expense related to this asset, estimated at $1.4 million per year, has been reflected in the proforma statement of operations on future operations.

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

You should read this discussion together with the financial statements and other financial information included in this Annual Report on Form 10-K.

Overview

We design, manufacture and supply components and systems that store gaseous fuels and monitor and control the pressure and flow of those fuels for use in fuel cells and internal combustion engines. Historically, most of our revenues have been derived from the sale of products to automotive OEMs that enable their traditional internal combustion engines to run on clean burning alternative fuels, such as propane and natural gas, instead of gasoline. Our goal is to commercialize systems that will provide fuel storage, fuel delivery and electronic controls for fuel cells and internal combustion engines in the automotive OEM market.

We supply our advanced gaseous fuel systems for alternative fuel vehicle applications to OEM customers for use by consumers and commercial and government fleets. Since 1997, we have sold over 14,000 fuel systems for alternative fuel vehicle applications. We also provide our integrated gaseous fuel systems for fuel cell applications to major OEMs through funded research and development contracts and on a prototype basis. We believe that a significant portion of our revenues will be derived from our fuel storage and fuel metering products once those products are available on a commercially manufactured basis.

Although we classify our business operations in one operating segment, our Alternative Fuel Automotive OEM business, our chief operating decision maker allocates resources and tracks performance in three areas; our Alternative Fuel business, Research & Development and Corporate Expenses. We generate revenues through the sale of fuel storage, fuel delivery and electronic control systems to OEMs, primarily to General Motors, and the installation of our products into OEM vehicles. We also generate contract revenue by providing engineering design and support to OEMs so that our fuel storage, fuel delivery and electronic control systems integrate and operate with certain of their alternative fuel vehicles. For the fiscal year ended April 30, 2001 and 2002, approximately 98.7% and 79.9% of our revenues were related to sales of our products to and contracts with General Motors.

In the longer term we will require significant capital expenditures to construct additional manufacturing and assembly capacity required to support the production of our products. We anticipate that our aggregate expenditures to move our prototype products to the production stage will be approximately $30 to $35 million, but actual expenditures may differ materially, depending on the availability of funds, customer requirements, and the amounts actually contributed by our customers toward development efforts.

We recognize revenue for product sales when goods are shipped in accordance with our shipping terms. Contract revenues are recognized based on the percentage of completion method. Corporate expenses represent a sub-category of selling, general and administrative expense. Corporate expenses consist of general and administrative expense incurred at the corporate level.

For all periods presented in our financial statements, we have experienced negative gross margin on our product sales. For all but one of our GM applications, we generate positive materials gross margin on product sales. In our inventory values, we have only capitalized labor and manufacturing costs to the extent realizable based on our current sales prices for our products. Our cost structure is volume-driven, and to date we have not yet recognized product sales sufficient to cover our fixed investment in manufacturing expenses. We have implemented measures to make our manufacturing processes efficient and have made efforts to minimize fixed manufacturing costs.

We expense all research and development when incurred. Research and development expense includes both customer-funded research and development and company-sponsored research and development. Customer-funded research and development consists primarily of expenses associated with contract revenue. These expenses include applications development costs in Quantum funded under customer contracts.

General Motors Relationship. Our strategic alliance with General Motors became effective upon completion of the spin-off. We believe that our strategic alliance with General Motors will advance and commercialize, on a global basis, the integration of our gaseous storage and handling systems into fuel cell systems used in the transportation markets. Under the alliance, General Motors will promote us as a recommended provider of hydrogen storage, hydrogen handling and associated electronic controls that meet OEM requirements. Additionally, we and General Motors will co-develop technologies that will aid in more rapid commercialization of fuel cell applications. Furthermore, this experience will position us to be able to address the stationary power generation and portable power generation markets. Upon effectiveness of the strategic alliance, we issued to General Motors shares of our Series A common stock representing 19.9% of our total outstanding capital stock after the distribution in consideration of a nominal cash contribution and access to certain General Motors proprietary information. General Motors will be entitled to maintain its 19.9% equity interest at nominal cost until we complete an initial public offering for cash. However, additional shares that General Motors receives after the initial issuance of shares following the spin-off as a result of our private or public issuance of additional securities (other than pursuant to employee plans) will not be entitled to vote, so long as they are held by General Motors or anyone affiliated with General Motors. The agreement calls for revenue sharing payments, which do not commence until three years after the effective date of the agreement, on gross revenues from certain applications. Each party will retain the ownership of its existing technology and will jointly own technology that is jointly created under the alliance. We are free to use jointly created technologies in certain aspects of our business but will be required to share revenues with General Motors on fuel cell system-related products that are sold to General Motors or third parties.

Separation from IMPCO. We were incorporated under the laws of the State of Delaware on October 13, 2000, as a wholly owned subsidiary of IMPCO. IMPCO conducted our business through various departments, first as a division (the Automotive OEM Division) and most recently as a subsidiary (Quantum Fuel Systems Technologies Worldwide, Inc.). On July 23, 2002, IMPCO completed the distribution and spin-off of Quantum by distributing one share of Quantum common stock for every share of IMPCO common stock held on the record date, which was July 5, 2002. Prior to the distribution, we entered into several agreements with IMPCO with respect to, among other things, intellectual property, interim services and a number of ongoing commercial relationships. The interim services agreement provides for specified charges generally intended to allow the providing company to fully recover the allocated direct costs of providing the services, plus all out-of-pocket costs and expenses, but without any profit. With limited exceptions, these interim services are not expected to extend beyond six months from the distribution date. The pricing terms for goods and services covered by the commercial agreements reflect negotiated prices. Please see Item 13.—"Certain Relationships and Related Transactions" and "Note 3 —Related Party Transactions" in the notes to the financial statements for a more detailed discussion of these agreements.

Our financial statements, which are discussed below, reflect the historical financial position, results of operations and cash flows of the business transferred to us from IMPCO as part of the distribution. The financial information included herein, however, may not necessarily reflect our financial position, results of operations and

cash flows in the future or what our financial position, results of operations and cash flows would have been had we been a stand-alone company during the periods presented.

Cash, cash equivalents, debt and interest expense. IMPCO used a centralized approach to cash management and the financing of its operations. Cash deposits from our operations were transferred to IMPCO on a regular basis and are netted against the owner's net investment account. As a result, none of IMPCO's cash, cash equivalents or debt at the corporate level had been allocated to us in the financial statements. Cash in the financial statements represents amounts held by us as petty cash and immediate funds needed to satisfy outstanding payables. Changes in invested equity represent any funding required from IMPCO for working capital, acquisition or capital expenditure requirements after giving effect to our transfers to or from IMPCO of its cash flows from operations. Until fiscal year 2002, we had been funded by IMPCO with no debt obligations being transferred to us except for certain capital leases. Therefore due to the low level of interest-bearing debt, our interest expense has been minimal with total interest expense of $0, $4,167, and $488,442 for fiscal years 2000, 2001, and 2002. Due to the assumption of our line of credit obligation of $8.6 million by IMPCO as part of the spin-off, we do not expect to incur interest expense in the short-term.

Corporate overhead and research. The financial statements include allocations of IMPCO corporate headquarters expenses relating to our business. General corporate overhead has been allocated either based on the ratio of our headcount to IMPCO's total headcount, on our revenue as a percentage of IMPCO's total revenue, or specifically identified costs for our business. General corporate overhead primarily includes salary and expenses for the executive management, finance, legal, human resources, information services and investor relations departments and amounted to approximately $2,126,000, $3,117,000, and $3,209,000 in 2000, 2001 and 2002. Management believes the costs charged for these services are a reasonable representation of the costs that would have been incurred if we had performed these functions as a stand-alone company. Following the spin-off, we will perform these functions using our own resources or purchased services.

The financial statements for fiscal years 2000 and 2001 also include an allocation from IMPCO to fund a portion of the costs of basic research that we conduct. This allocation was based on management's determination of which corporate projects were related to the specific intellectual property that IMPCO transferred to us as part of the contribution. This allocation amounted to approximately $7,050,000, $5,601,000, and $0 for fiscal 2000, 2001 and 2002. Management believes the costs charged are a reasonable representation of the costs that we would have incurred if we had performed these functions as a stand-alone company. Beginning in fiscal year 2002, we satisfied our basic research requirements using our own resources or through purchased services.

We will continue to require significant research and development expenditures over the next several years in order to commercialize our products for fuel cell applications.

Income taxes. Income taxes were calculated as if we filed separate tax returns. However, IMPCO was managing its tax position for the benefit of its entire portfolio of businesses, and its tax strategies are not necessarily reflective of the tax strategies that we would have followed or will follow as a stand-alone company.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to bad debts, inventories, warranty obligations, long-term service contracts, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements:

We recognize revenue and profit as work progresses on long-term, fixed price contracts for product application development using the percentage-of-completion method, which relies on estimates of total expected contract revenue and costs. We follow this method because we can make reasonably dependable estimates of the revenue and costs applicable to various stages of a contract. Recognized revenues and profit are subject to revisions as the contract progresses to completion. Revisions in profit estimates are charged to income in the period in which the facts that give rise to the revision become known.

We provide for the estimated cost of product warranties at the time revenue is recognized. While we engage in product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required.

We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Results of Operations

Years Ended April 30, 2001 and 2002

	Revenues		Operating Loss	
	Year Ended April 30,		Year Ended April 30,	
	2001	2002	2001	2002
	(in thousands)			
Alternative fuels	$23,358	$23,403	$ (1,617)	$ (8,512)
Research and development	—	—	(21,164)	(26,323)
Corporate expenses	—	—	(7,459)	(8,063)
Total	$23,358	$23,403	$(30,240)	$(42,898)

Alternative fuels. Net revenues remained relatively unchanged at $23.4 million in fiscal year 2002, increasing only $0.05 million, or 0.2%. Product sales remained at $15.5 million in fiscal year 2002. Product sales consist of those associated with General Motors' mid-size automobiles, pick-up trucks, and van platforms equipped with our bi-fuel and compressed natural gas fuel systems and General Motors' medium duty trucks equipped with dedicated liquid propane gas kits. The slight increase in product sales was generated mainly by higher service parts sales. Product sales also increased slightly due to higher sales of GM van platforms, partially offset by lower sales of pick-up trucks, midsize automobiles, and medium duty truck platforms.

Cost of product sales increased $6.1 million, or 31.5%, from $19.5 million in fiscal year 2001 to $25.6 million in fiscal year 2002. The increase in cost of product sales was due to a $1.4 million increase in inventory reserves, of which $0.6 million was related to a "lower of cost-or-market" reserve for the General Motors' pick-up truck application and $0.5 million related to increases in the provision for obsolescence, $1.4 million in higher material cost related to product mix, a $1.0 million increase in warranty reserves due to increased vehicles sales and higher warranty claims experienced, primarily in our medium duty applications, a $1.8 million increase in labor and manufacturing overhead mainly due to pre-production efforts associated with our fuel storage tanks, a $0.2 million increase in freight charges, and a $0.2 million increase in production related scrap. The "lower of cost-or-market" reserve on the General Motors' pick-up truck application is due to a fixed

sales price and a higher than expected material cost. The higher expected material cost is due to lower anticipated volumes and no firm sales commitment from General Motors. As such, once product is received for this application, we immediately reduce our inventory value to reflect the selling price of the application. We expect the level of the "lower of cost-or-market" adjustment to be lower in the future as a result pricing increases on the pick-up truck application.

Gross profits on product sales were $6.1 million, which was 152.9% lower in fiscal year 2002 as compared to fiscal year 2001, due to a $6.1 million increase in cost of product sales.

Contract revenues remained relatively unchanged, increasing 0.4% to $7.9 million in fiscal year 2002. The increase is primarily due to new fuel cell contracts, which were offset by a $3.5 million decline in General Motors' alternative fuel model year program revenues. Contract revenue is primarily for system development and application engineering of our products under funded General Motors and other OEM contracts, and other funded contract work with state and federal agencies.

For the fiscal year 2002, research and development associated with cost of contract revenues included in our alternative fuels reporting unit increased $0.8 million, or 14.5%, to $6.3 million as compared to $5.5 million in fiscal year 2001. The increase for fiscal year 2002 is due to a margin decrease from 30.2% to 20.2%. The decrease in margin is primarily due to $1.3 million in cost overruns on the CNG pick-up truck development programs and the cancellation of the GM LPG pick-up truck development program.

Research and development. Research and development expense increased by $6.0 million, or 22.4%, to $32.7 million for fiscal year 2002, from the $26.7 million reported in fiscal year 2001. The increase in research and development primarily relates to a $4.2 million increase attributable to additional facilities and additional research and development support activities, a $1.0 million increase for fuel storage, fuel delivery systems, and vehicle integration for fuel cell and CNG-related OEM programs for internally funded fuel cell and alternate fuel system and component application development work, and a $0.8 million increase in product application development support costs.

Corporate Expenses. Corporate expenses increased by $0.6 million, or 8.1%, to $8.1 million for fiscal year 2002 from $7.5 million for fiscal year 2001. The increase for fiscal year 2002 was mainly due to non-recurring charges of $2.0 million for legal and consulting services associated with the spin-off transaction, the strategic alliance with General Motors and legal proceedings related to patent infringement described in "Business—Legal Proceedings." These increases were partially offset by cost reduction efforts executed in the second and third quarter of fiscal year 2002.

Operating losses increased by $12.7 million, or 41.9%, from $30.2 million in fiscal year 2001 to $42.9 million in fiscal year 2002. The increase in loss was attributable to a $6.1 million increase in negative gross profits on product sales, a $6.0 million increase in research and development expenses, and a $0.6 million increase in general and administrative expenses. For the fiscal year 2002, operating losses include $1.2 million in restructuring charges for the closure of our Mexico assembly operation, the closure of a Michigan facility, and associated personnel severance costs. We anticipate our operating loss for next fiscal year will be less than experienced in the last fiscal year, as a result of staff and cost reductions implemented during the second and third quarters of fiscal year 2002, higher contract revenues and improved pricing on production programs.

While we did not have any amortization charges during fiscal year 2002, we expect that such charges will be substantial in future years as a result of our strategic alliance with General Motors. We will record the value of the shares issued to General Motors as an intangible asset at fair market value on the date of distribution. We will amortize this value over the ten year term of the strategic alliance.

Interest Expense. Interest expense increased $484,275 from $4,167 in fiscal year 2001 to $488,442 in fiscal year 2002. The increase is due to a higher level of capital leases and the borrowing under our line of credit facility. We anticipate that interest expense for fiscal year 2003 will be lower than levels experienced during fiscal year 2002 due to lower anticipated levels of outstanding debt.

Provision for Income Taxes. Income tax expense increased slightly to $800 to record our minimum state income tax liability. No additional expense was charged due to our net losses during the period. A valuation allowance has been established for deferred tax assets due to our lack of earnings history. We expect that income tax expense will be the same for the next fiscal year as we expect to continue to incur operating losses. Income taxes in our financial statements have been calculated on a separate tax return basis. The tax credits and net operating losses incurred through the date of the distribution will remain with IMPCO after the spin-off.

Years Ended April 30, 2000 and 2001

	Revenues		Operating Income (Loss)	
	Year Ended April 30,		Year Ended April 30,	
	2000	2001	2000	2001
	(in thousands)			
Alternative fuels	$22,341	$23,358	$ 1,475	$ (1,617)
Research and development	—	—	(7,171)	(21,164)
Corporate expenses	—	—	(4,939)	(7,459)
Total	$22,341	$23,358	$(10,635)	$(30,240)

Alternative fuels. Net revenues increased $1.1 million, or 4.6%, from $22.3 million in fiscal year 2000 to $23.4 million in fiscal year 2001.

Product sales increased $2.3 million, or 18.3%, from $13.1 million in fiscal year 2000 to $15.4 million in fiscal year 2001. This increase was primarily due to an increase in unit sales to General Motors. Product sales consists of those associated with General Motors mid-size automobiles, pick-up trucks, and van platforms equipped with our bi-fuel compressed natural gas fuel system and General Motors medium-duty trucks equipped with dedicated liquid propane gas kits.

Cost of product sales increased $4.4 million, or 29.0%, from $15.1 million in fiscal year 2000 to $19.5 million in fiscal year 2001. This increase in cost of product sales was due to $1.4 million in higher material cost related to higher production volume, a $1.3 million increase in manufacturing overhead mainly due to pre-production efforts associated with our fuel storage tanks, a $0.5 million increase in production related scrap, a $0.4 million increase in additions to the provision for inventory obsolescence, a $0.3 million in additional direct labor for assembled products, and a $0.2 million increase in freight charges. Warranty reserves increased by $0.4 million during the year due to the increased number of vehicles placed into service. Provision for inventory obsolescence is made for each model year based on inventory levels necessary to provide for future warranty and service parts, as well as for parts that cannot be transferred to the next model year program.

Gross margins on product sales were $2.0 million lower in fiscal year 2001 as compared to fiscal year 2000, primarily due to a $4.4 million increase in cost of product sales, offset partially by a $2.4 million increase in product sales.

Contract revenue decreased $1.4 million, or 14.8%, from $9.3 million in fiscal year 2000 to $7.9 million in fiscal year 2001. This decrease was primarily due to lower contract levels, which reflect efficiencies that result from our ability to transfer knowledge between prior model year and current model year contracts. Additionally, the contract revenues recognized on pick-up truck platforms declined due to an expanded scope of the 2001 program to include the 2002 model year, which includes higher engineering costs to complete without a commensurate increase in the contract value.

For the fiscal year 2001, research and development associated with cost of contract revenues included in our alternative fuels reporting unit decreased $0.3 million, or 4.6% to $5.5 million as compared to the $5.8 million reported in fiscal year 2000. The decrease for the fiscal year 2001 is due to reduced revenue of $1.4 million

partially offset by a decrease in margin from 37.7% to 30.2%. The decrease in margin is primarily due to $0.6 million in cost overruns on the CNG and LPG pick-up truck development programs.

Research and development. Research and development expense increased by $14.0 million, or 195.1%, from $7.2 million in fiscal year 2000 to $21.2 million in fiscal year 2001. The increase in research and development primarily relates to our $1.7 million increase in application development support costs and a $9.9 million increase for fuel storage, fuel delivery systems, and vehicle integration for fuel cell OEM programs with the remaining $2.4 million attributable to additional facilities and additional research and development activities to support the fuel cell OEM programs. In order to satisfy the anticipated increased OEM demand, we opened four additional facilities to expand our testing capabilities and vehicle integration capacity.

Corporate expenses. Corporate expenses increased by $2.5 million, or 51.0%, from $4.9 million in fiscal year 2000 to $7.5 million in fiscal year 2001. The increase was primarily due to a $1.8 million increase in employment fees and relocation related to our headcount increase. Corporate expenses also include $3.1 million allocated from IMPCO for fiscal year 2001 for our proportional share of the corporate expenses incurred at IMPCO. This reflects a $1.0 million increase from the previous year.

Operating losses increased $19.6 million, or 184.3%, from $10.6 million in fiscal year 2000 to $30.2 million in fiscal year 2001. This increase was primarily attributable to a $14.0 million increase in research and development expenses, a $2.5 million increase in corporate expenses, a $2.0 million decrease in product gross margins, a decrease in cost of contract revenues of $0.3 million and a $1.4 million decrease in contract revenues.

Interest Expense. Interest expense increased $4,167 from $0 in fiscal year 2000 to $4,167 in fiscal year 2001.

Provision for Income Taxes. Income tax expense remained flat as no expense was charged due to our net losses during the period. A valuation allowance has been established for deferred tax assets due to our lack of earnings history. Income taxes in our financial statements have been calculated on a separate tax return basis.

Liquidity and Capital Resources

We have historically used cash generated from IMPCO's operations, bank financings and investments from IMPCO to fund capital expenditures and research and development, as well as to invest in and operate our existing operations and new businesses. In July 2000, IMPCO completed an equity offering in which it received $53.5 million. Until fiscal year 2002, we had been funded entirely from IMPCO in the form of equity investments. In fiscal year 2002, we became a co-borrower with IMPCO of $12.0 million on a debt facility with Bank of America. Due to this capital structure, we have not carried any debt on our balance sheet until the fiscal year 2002. On April 30, 2001, IMPCO amended its credit facility with Bank of America NT&SA to include a $5 million line of credit for our use. We and IMPCO were co-borrowers on this line of credit, and it was secured by our assets. In September 2001, the credit facility with Bank of America was amended to allow us to increase our use of the line of credit from $5.0 million to $15.0 million. As of April 30, 2002, the outstanding balance on this line of credit was approximately $8.6 million and bore an interest rate of 7.0%. This revolving line of credit carried an interest rate of prime plus 2.25%. On June 24, 2002, IMPCO amended its credit facility with Bank of America to remove us as a co-borrower under the line of credit and to release the pledge of our assets under the facility, effective upon completion of the distribution.

Prior to the distribution, IMPCO made an additional capital investment of $23.6 million, consisting of the assumption of outstanding amounts under the debt facility, which was $8.6 million, plus a cash infusion of $15 million, which we believe will provide the necessary working capital to fund operations for the next 12 months. As of April 30, 2002, we had no material commitments for capital expenditures.

We currently anticipate that we will require additional sources of financing in order to continue operations beyond the near term and complete the development and commercialization of our fuel cell enabling

technologies. These additional sources of financing may include bank borrowings or public or private offerings of equity or debt securities. We cannot assure you that such additional sources of financing will be available on acceptable terms, if at all.

Net cash used in operating activities was $34.5 million in fiscal year 2002 as compared to $25.8 million for fiscal year 2001. The increase in cash used in operating activities resulted primarily from the net operating loss for fiscal year 2002 of $43.4 million as compared to the net operating loss of $30.2 million for fiscal year 2001. Partially offsetting this increase was a $5.2 million decrease in accounts receivable due to increased collection efforts and a $0.9 million decrease in other current assets. We expect that our use of cash in operating activities for fiscal year 2003 will be lower than experienced in fiscal year 2002 as a result of staff and cost reductions implemented in the second and third quarters of fiscal year 2002.

Net cash used in investing activities in fiscal year 2002 was $3.4 million, a decrease of $5.7 million from fiscal year 2001. The decrease is a result of the completion of a majority of the initial expansion plans in the prior fiscal year as well as a realigning of our investment priorities with our available liquidity.

Net cash provided by financing activities for fiscal year 2002 was $38.1 million as compared to $34.9 million for fiscal year 2001. This increase was due to advances on our line of credit in the amount of $8.6 million. The increase was partially offset by a decrease of $5.2 million in advances from IMPCO from 2002 to 2001.

The ratio of current assets to current liabilities was 0.81:1 at April 30, 2002 and 2.3:1 at the end of fiscal year 2001. During fiscal year 2002, our total working capital decreased by $14.7 million from $11.3 million at the end of fiscal year 2001.

Derivative Financial Instruments

We are exposed market to risk from exposures to changes in interest rates due to our financing, investing and cash management activities. Specifically, our line of credit was subject to fluctuations in interest rates. Based on amounts outstanding at April 30, 2002 a 1% increase in interest rates would result in additional annual interest expense by $86,250. Our lines of credit outstanding at April 30, 2002 approximates its fair value.

To date, we have not used any derivative financial instruments for the purpose of reducing our exposure to adverse fluctuations in interest rates. We are not a party to leveraged derivatives and do not hold or issue financial investments for speculative purposes.

Recent Accounting Pronouncements

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets (FAS 144), which addresses financial accounting and reporting for the impairment or disposal of long-lived assets and supersedes SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of, and the accounting and reporting provisions of APB Opinion No. 30, Reporting the Results of Operations for a disposal of a segment of a business. FAS 144 is effective for fiscal years beginning after December 15, 2001, with earlier application encouraged. We expect to adopt FAS 144 as of May 1, 2002 and do not expect that the adoption of the Statement will have a significant impact on our financial position and results of operations.

In June 2001, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 141, Business Combinations, and No. 142, Goodwill and Other Intangible Assets, effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests in accordance with the Statements. Other intangible assets will continue to be amortized over their useful lives. We expect to adopt FAS 141 as of May 1, 2002 and do not expect that the adoption of the Statement will have a significant impact on our financial position and results of operations.

RISK FACTORS

The preceding discussion contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We face a number of risks and uncertainties which could cause actual results or events to differ materially from those contained in any forward-looking statement. Factors that could cause or contribute to such differences include, but are not limited to, the following:

Risks Related To Our Separation From IMPCO

We have no history operating as an independent company, and we may be unable to make the changes necessary to operate successfully as a stand-alone business.

Prior to the distribution, our business was operated by IMPCO as a segment of its broader corporate organization rather than as a stand-alone company. IMPCO assisted us by providing financing and other corporate functions such as legal and tax functions. Following the distribution, IMPCO has no obligation to provide assistance to us other than limited interim services, which will be provided by IMPCO for up to six months following the distribution. These interim services include, among other things, immigration services, employee benefits administration, affirmative action administration, and payroll processing. Because we have never operated as an independent company, we cannot assure you that we will be able to successfully implement the changes necessary to operate independently. We could also incur significant additional costs operating independently, which could have a negative effect on our business, results of operations and financial condition.

We are in the process of creating our own, or engaging third parties to provide, systems and business functions to replace many of the services and business functions IMPCO provides us. We may not be successful in implementing these changes. If we do not have in place our own business functions or if we do not have agreements with other service providers once our interim services agreement with IMPCO expires, our business, results of operations and financial condition may be negatively affected.

Our historical financial information may not be representative of our results as a stand-alone company and, therefore, may not be reliable as an indicator of our historical or future results.

The historical financial data we have included in this Annual Report may not reflect what our results of operations, financial position and cash flows would have been had we been a stand-alone company during the periods presented or what our results of operations, financial position and cash flows will be in the future. This is because:

- our financial statements reflect allocations, primarily with respect to corporate overhead and research and development, for services provided to us by IMPCO, which allocations may not reflect the costs we will incur for similar services as a stand-alone company; and
- the information does not reflect changes that we expect to incur in the future as a result of our separation from IMPCO, including changes in how we fund our operations, conduct research and development, and manage tax and employee matters.

Therefore, our financial statements may not be indicative of our future performance as an independent company. For additional information about our past financial performance and the basis of presentation of our financial statements, please see “Selected Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and the notes thereto included elsewhere in this Annual Report.

We will no longer be able to access IMPCO’s cash flows or its ability to raise capital.

Historically IMPCO provided financing to us through its cash flows, by incurring debt and obtaining equity financing at the parent level. We are no longer a co-borrower under the IMPCO debt facility. We will not have access to financing from IMPCO and we will be responsible for obtaining our own debt and equity financing.

We will need to raise additional capital in order to continue operations and complete our product development and commercialization plans beyond the near term.

We believe that our cash flow from operations and available cash will be adequate to meet our current liquidity needs. However, we anticipate that we will need to raise funds to continue operations beyond the near term and complete the development and commercialization of our fuel cell enabling technologies. These funds may not be available on acceptable terms, if at all. Our product development and commercialization schedule could be delayed if we are unable to fund our research and development activities or the development of our manufacturing infrastructure for new products. We do not know whether we will be able to secure additional funding on terms acceptable to us, if at all.

Because there has not been any public market for our common stock and our stock may be considered a technology stock, the market price and trading volume of our common stock may be volatile.

Prior to July 11, 2002, there was no trading market for our common stock. Accordingly, we cannot predict the extent to which investors' interest will lead to a liquid trading market or whether the market price of our common stock will be volatile. The combined trading prices of IMPCO common stock and our common stock after the distribution may be less than, equal to or greater than the trading price of IMPCO common stock prior to the distribution. The market price of our common stock could fluctuate significantly for many reasons, including in response to the risk factors listed in this Annual Report or for reasons unrelated to our specific performance. Our common stock may be considered a technology stock by investors. Technology stocks have recently experienced extreme price and volume fluctuations. Therefore, the market price and trading volume of our common stock also may be extremely volatile.

The trading prices for our common stock may be adversely affected by the sale of a substantial number of shares. Prices for our common stock may also be influenced by the depth and liquidity of the market for our common stock, investor perceptions about us and our businesses, our future financial results, the absence of cash dividends on our common stock and general economic and market conditions.

There are certain tax risks in connection with the distribution.

If the distribution qualifies under Section 355 of the Internal Revenue Code, it will be tax-free to IMPCO's stockholders for federal income tax purposes, except for cash received in lieu of fractional shares. No ruling has been or will be sought from the Internal Revenue Service with respect to the federal income tax consequences of the distribution. Although IMPCO received an opinion from Morrison & Foerster LLP to the effect that the distribution will qualify under Section 355 of the Internal Revenue Code, their opinion is not binding on the Internal Revenue Service. Accordingly, no assurance can be given that the Internal Revenue Service or the courts will agree with their opinion. The opinion was also subject to certain assumptions and the accuracy and completeness of certain factual representations and statements made by us and IMPCO, including a representation that we would complete an initial public offering of our stock within one year following the distribution. If these assumptions, representations or statements are incorrect or incomplete in any material respect, the conclusions set forth in the opinion may not be correct. Although neither we nor IMPCO are aware of any facts or circumstances which would cause such representations or assumptions to be untrue, we cannot assure you that the distribution will be tax-free to IMPCO's stockholders. Neither we nor IMPCO will indemnify any IMPCO stockholder who receives shares of our common stock in the distribution for any tax liabilities. If the distribution so qualifies, it will be tax-free to IMPCO as well, unless Section 355(e) of the Internal Revenue Code applies to the distribution, as discussed below.

Even if the distribution qualifies under Section 355 of the Internal Revenue Code, it will be taxable to IMPCO (but not its stockholders) if Section 355(e) of the Internal Revenue Code applies to the distribution. Section 355(e) of the Internal Revenue Code will apply if 50% or more of IMPCO stock or our stock, by vote or value, is acquired by one or more persons, other than IMPCO's historic stockholders who received our common stock in the distribution, acting pursuant to a plan or a series of related transactions that includes the distribution.

Substantial uncertainty exists on the scope of Section 355(e) of the Internal Revenue Code, and we, our stockholders, IMPCO and its stockholders have undertaken, contemplate undertaking or may otherwise undertake in the future transactions which may cause Section 355(e) to apply to the distribution. Accordingly, we cannot provide you any assurance that Section 355(e) of the Internal Revenue Code will not apply to the distribution.

We may be liable for taxes arising in connection with the distribution, and the tax characteristics of the distribution may interfere with our ability to engage in desirable strategic transactions and issue equity securities.

Although any corporate taxes imposed in connection with the distribution generally would be imposed on IMPCO, we will be liable for all or a portion of such taxes in certain circumstances. As part of the distribution, IMPCO and we entered into a tax allocation and indemnification agreement. Under this agreement, we generally are liable for taxes and liabilities relating to the failure of the contribution to be tax-free. In addition, under the Contribution and Distribution Agreement with IMPCO, if the distribution fails to qualify under Section 355 of the Internal Revenue Code or Section 355(e) of the Internal Revenue Code applies to the distribution because of some action or omission by us, then we will be solely liable for any resulting taxes. We also agreed that until three years after the distribution date, we will not take any of the following actions unless prior to taking such action we have obtained a written opinion of a law firm or a ruling from the Internal Revenue Service that such action will not affect the tax-free treatment of the distribution:

- merge or consolidate with another corporation
- liquidate or partially liquidate;
- sell or transfer all or substantially all of our assets;
- redeem or repurchase our stock (except in certain limited circumstances); or
- take any other action which could reasonably be expected have the effect of causing Section 355(e) of the Code to apply to the distribution.

While we are not required to obtain an opinion or ruling described above prior to issuing our Series A or Series B common stock to General Motors or in order to issue our common stock in connection with our initial public offering, we will still have to indemnify IMPCO if the distribution becomes taxable to IMPCO as a result of these or any other transaction that we undertake. In the event that we were liable for such taxes, the payment would have a substantial and material adverse effect on our business, financial position and results of operations. This obligation may also discourage, delay or prevent a merger, change of control, or other strategic or capital raising transactions involving our outstanding equity or issuance of new equity.

Risks Relating to Our Business

We may never be able to introduce commercially viable fuel storage, fuel delivery or electronic control products for fuel cell systems.

We do not know whether or when we will successfully introduce commercially viable fuel storage, fuel delivery or electronic control products for the fuel cell market. We have produced and are currently demonstrating a number of test and evaluation systems and are continuing our efforts to decrease the costs of our systems, improve their overall reliability and efficiency, and ensure their safety. However, we must complete substantial additional research and development on our systems before we can introduce commercially viable fuel storage and fuel delivery systems for fuel cells. Even if we are able to do so, our efforts will still depend upon the success of other companies in producing commercially viable fuel cells. In addition, we are not currently manufacturing fuel cell enabling products on a large scale and will need to expand our facilities to do so. The manufacture and use of our TriShield all-composite tank may not be successful, which could have an adverse impact on our growth in fuel cell enabling technologies.

A mass market for fuel storage, fuel delivery and electronic control systems for fuel cells may never develop or may take longer to develop than we anticipate.

Fuel cell systems represent an emerging technology, and we do not know whether OEMs will incorporate these technologies into their products or pursue these technologies on a large scale. In particular, if a mass market fails to develop or develops more slowly than we anticipate for fuel cell powered transportation and power generation applications, we may be unable to recover the expenditures incurred to develop our fuel systems for fuel cells and may be unable to achieve profitability in that portion of our business, any of which could negatively impact our business. Many factors that are beyond our control may have a negative effect on the development of a mass market for fuel cells and our fuel cell products and systems. These factors include the following:

- the cost competitiveness and physical size of fuel cell systems;
- the availability, future costs and safety of hydrogen, natural gas or other potential fuel cell fuels;
- consumer reluctance to adopt fuel cell or alternative fuel products;
- OEM reluctance to replace current technology;
- consumer perceptions of fuel cell systems;
- regulatory requirements; and
- the emergence of newer, breakthrough technologies and products by our competitors in the fuel cell industry.

We cannot predict the long-term impact of our recent cost reduction measures.

During our 2002 fiscal year, we implemented measures in an effort to reduce costs. These measures included reductions in our workforce and consolidation of facilities. We reduced the number of full-time employees from 323 at July 31, 2001 to 156 at April 30, 2002. We cannot predict with any certainty the long-term impact of our workforce reductions and any reductions we are compelled to make in the future. Reductions in our workforce could make it difficult to motivate and retain remaining employees, which would affect our ability to deliver our products in a timely fashion and otherwise negatively affect our business. We also cannot assure you that these measures will be successful in achieving the expected benefits within the expected time frames or that the workforce reductions will not impair our ability to achieve current or future business objectives.

Our revenue depends to a great extent on our relationship with General Motors and General Motors' commitment to the commercialization of the fuel cell and alternative fuel automotive OEM markets.

A substantial portion of our revenues for the fiscal year ended April 30, 2002 related to sales of our products to and contracts with General Motors. Our business, results of operations and financial condition would be significantly harmed by any substantial reduction in purchases of our products by General Motors, and it would be difficult for us to replace those revenues on a timely basis, or at all.

Our business and results of operations would be adversely affected in the event General Motors were to significantly reduce its purchases of our products or terminate its relationship with us. Our ability to sell our products to the fuel cell and automotive OEM markets depends to a significant extent upon General Motors' and its partners' worldwide sales and distribution network and service capabilities. Any change in strategy by General Motors with respect to fuel cells or alternative fuels could harm our business by reducing or eliminating a substantial portion of our sales, whether as a result of market, economic or competitive pressures, including any decision by General Motors:

- to alter its commitment to our fuel storage, fuel delivery and electronic control technology in factor of other competing technologies;

- to exit the automotive OEM alternative fuel market;
- to develop fuel cells or alternative fuel systems targeted at different application markets than ours; or
- to focus on different energy product solutions.

We intend to make significant investments in the research and development of fuel cell enabling technologies, which may not result in any corresponding increase in net revenue, and may contribute to continuing operating losses.

We anticipate that we will make significant investments in research and development as we continue our efforts in developing fuel cell enabling technologies. We expect to continue to incur operating losses as a result of these research and development expenditures for at least the next 12 months. We may not recover this investment.

Our business depends on the growth of the fuel cell and alternative fuel markets.

Our future success depends on the continued expansion of the fuel cell and alternative fuel vehicle industries, which have not yet gained broad acceptance. In the United States and certain of our other target markets, alternative fuel such as natural gas currently cannot be readily obtained by consumers for motor vehicle use and only a small percentage of motor vehicles manufactured in 2000 was equipped to use alternative fuels. We cannot assure you that the markets for fuel cells or alternative fuel vehicles will gain broad acceptance or, if they do, that they will result in increased sales of our advanced fuel system products. In addition, we have designed many of our products for alternative fuel vehicles powered by both fuel cells and internal combustion engines, but not currently for other alternative power sources, such as electricity or alternate forms of existing fuels. If the major growth in the alternative fuel market relates solely to existing fuels, our revenues may not increase and may decline.

Users of gaseous alternative fueled or fuel cell powered vehicles may not be able to obtain fuel conveniently and affordably, which may adversely affect the demand for our products.

Vehicles and equipment powered by gaseous alternative fuels run primarily on natural gas or propane. Fuel cells run on hydrogen or fuels containing hydrogen. Gasoline requires the development of additional technologies for its use with fuel cells, namely reformation. The construction of a distribution system to deliver natural gas, propane or hydrogen, or a suitable fuel containing hydrogen, will require significant investment by third parties. An adequate fuel distribution infrastructure may not be adopted. We are relying on third parties, most of which are committed to the existing gasoline infrastructure, to build this infrastructure. If these parties build a fuel distribution infrastructure, the fuel delivered through it, both due to the cost of the delivery system and the cost of the fuel itself, may have a higher price than users are willing to pay. If users cannot obtain fuel conveniently or affordably, a mass market for vehicles and equipment powered by gaseous alternative fuels or fuel cells is unlikely to develop.

Our ability to attract customers and sell products successfully in the alternative fuel industry also depends on a price disparity between liquid fuels, such as petroleum and gasoline, and gaseous fuels, such as propane and natural gas. This price disparity may not continue. Should this disparity narrow or disappear, it could adversely affect the demand of our products.

We currently face and will continue to face significant competition, which could result in a decrease in our revenue.

We currently compete with companies that are developing fuel storage, fuel delivery and electronic control products that may be more commercially feasible than our products. Furthermore, companies that are developing fuel cells may not require fuel storage, fuel delivery or electronic control products of the type we design and produce.

Increases in the market for alternative fueled vehicles may cause OEMs to find it advantageous to develop and produce their own fuel management equipment rather than purchasing the equipment from suppliers such as us. In addition, greater acceptance of alternative fuel engines or fuel cells may result in new competitors. Should any of these events occur, the total potential demand for our products could be adversely affected and cause us to lose existing business.

Our business may be subject to product liability claims, which could be expensive and could result in a diversion of management's attention.

The automotive industry experiences significant product liability claims. As a supplier, we face an inherent business risk of exposure to product liability claims in the event that our products or the equipment into which our products are incorporated malfunction, resulting in personal injury or death. We may be named in product liability claims even if there is no evidence that our systems or components caused the accident. Product liability claims could result in significant losses as a result of expenses incurred in defending claims or the award of damages. The sale of systems and components for the transportation industry entails a high risk of these claims. In addition, we may be required to participate in a recall involving these systems if any of our systems prove to be defective, or we may voluntarily initiate a recall or make payments related to such claims as a result of various industry or business practices or the need to maintain good customer relationships. We cannot assure you that our product liability insurance will be sufficient to cover all product liability claims, that such claims will not exceed our insurance coverage limits or that such insurance will continue to be available on commercially reasonable terms, if at all. Any product liability claim brought against us could have a material adverse effect on our reputation and business.

Our business may become subject to future product certification regulations, which may impair our ability to market our products.

We must obtain product certification from governmental agencies, such as the Environmental Protection Agency and the California Air Resources Board, to sell certain of our products in the United States. A significant portion of our future sales will depend upon sales of fuel management products that are certified to meet existing and future air quality and energy standards. We cannot assure you that our products will continue to meet these standards. The failure to comply with these certification requirements could result in the recall of our products, civil penalties or criminal penalties.

We anticipate that regulatory bodies will establish certification procedures and impose regulations on fuel cell enabling technologies, which may impair our ability to distribute, install and service these systems. Any new government regulation that affects our advanced fuel technologies, whether at the foreign, federal, state or local level, including any regulations relating to installation and servicing of these systems, may increase our costs and the price of our systems. As a result, these regulations may have a negative impact on our business, results of operations and financial condition.

New technologies could render our existing products obsolete.

New developments in technology may negatively affect the development or sale of some or all of our products or make our products obsolete. There are a range of other technologies that could compete with fuel cell or alternative fuel technologies on which our business is currently focused, including electric and hybrid vehicles, and methanol-based fuel cell vehicles that require fuel reformation. Our success depends upon our ability to design, develop and market new or modified fuel storage, fuel delivery and electronic control products for fuel cells and internal combustion engines. Our inability to enhance existing products in a timely manner or to develop and introduce new products that incorporate new technologies, conform to increasingly stringent emission standards and performance requirements, and achieve market acceptance in a timely manner could negatively impact our competitive position. New product development or modification is costly, involves significant research, development, time and expense and may not necessarily result in the successful commercialization of any new products.

We depend on our intellectual property, and our failure to protect that intellectual property could adversely affect our future growth and success.

We rely on patent, trademark and copyright law, trade secret protection, and confidentiality and other agreements with our employees, customers, partners and others to protect our intellectual property for our fuel cell enabling and alternative fuel technologies. However, some of our intellectual property is not covered by any patent or patent application and, despite our precautions, it may be possible for third parties to obtain and use our intellectual property without authorization.

In connection with the distribution, IMPCO transferred six domestic patents, three foreign patents and one patent application to us. These patents will expire between July 2015 and December 2017. We do not know whether any patents will be issued or whether issued patents will be sufficiently broad to protect our technology or processes. Patent applications and issued patents may be challenged or invalidated. We could incur substantial costs in prosecuting or defending patent infringement suits.

Furthermore, the laws of some foreign countries may not protect intellectual property rights to the same extent as do the laws of the United States. It may be difficult for us to enforce certain of our intellectual property rights against third parties that may have acquired intellectual property rights by filing unauthorized applications in foreign countries to register the marks that we use because of their familiarity with our worldwide operations.

We cannot assure you that we will be successful in protecting our proprietary rights. Any infringement on any of our intellectual rights, especially in our developing fuel cell enabling technologies, could have an adverse effect on our ability to develop and sell successfully commercially competitive systems and components.

We depend on third-party suppliers for the supply of key materials and components for our products.

We have established relationships with third-party suppliers, which provide materials and components for our products, particularly the high-strength fiber used in our lightweight fuel storage tanks. A supplier's failure to supply materials or components in a timely manner or to supply materials and components that meet our quality, quantity or cost requirements, combined with a delay in our ability to obtain substitute sources for these materials and components in a timely manner or on terms acceptable to us, would harm our ability to manufacture our products or would significantly increase our production costs. In particular, a delay in the delivery of high-strength fiber from our current supplier, TCR Composites, or our decision to change to another supplier would result in a delay of the production of our products, which could negatively impact our business, results of operations and financial condition.

We could lose or fail to attract the personnel necessary to run our business.

Our success depends in large part on our ability to attract and retain key management, engineering, scientific, manufacturing and operating personnel. As we develop our fuel cell business, we will require additional technically skilled personnel. Recruiting personnel for the industries in which we engage is highly competitive, and the failure to attract or retain qualified personnel could have a material adverse effect on our business.

Our business could be harmed if we fail to meet OEM specifications.

We offer integrated alternative fuel systems, which include tanks, brackets, electronics, software and other components required to allow these products to operate in fuel cells or other alternative fuel applications. Customers for these systems require that these products meet strict OEM standards. Our compliance with these requirements has resulted in increased development, manufacturing, warranty and administrative costs. A significant increase in these costs could adversely affect our business, results of operations and financial condition. If we fail to meet OEM specifications on a timely basis, our relationships with OEMs may be harmed, which would have a material adverse effect on our business, results of operations and financial condition.

We may be subject to increased warranty claims.

In response to consumer demand, vehicle manufacturers have been providing, and may continue to provide, increasingly longer warranty periods for their products. As a consequence, these manufacturers require their suppliers, such as us, to provide correspondingly longer product warranties. As a result, we could incur substantially greater warranty claims in the future.

We may experience labor disputes at OEM facilities.

As we become more dependent on vehicle conversion programs with OEMs, we will become increasingly dependent on OEM production and the associated labor forces at OEM sites. Labor unions represent most of the labor forces at OEM facilities. Labor disputes could occur at OEM facilities, which could adversely impact our direct OEM product sales. For example, in 1998, as a result of a strike at one of our OEM's facilities, we experienced lower sales of our products used in General Motors pick-up trucks than we had expected for our 1999 fiscal year.

Changes in environmental policies could hurt the market for our products.

The market for alternative fueled and fuel cell vehicles and equipment, and the demand for our products are driven, to a significant degree, by local, state and federal regulations in the United States that relate to air quality and require the purchase of motor vehicles and equipment operating on alternative fuels. Similarly, foreign governmental regulations also affect our international business. These laws and regulations may change, which could result in transportation or equipment manufacturers abandoning their interest in alternative fueled and fuel cell powered vehicles. In addition, a failure by authorities to enforce current domestic and foreign laws or to adopt additional environmental laws could limit the demand for our products.

Although many governments have identified as a significant priority the development of alternative energy sources, and fuel cells in particular, we cannot assure you that governments will not change their priorities or that any change they make would not materially affect our revenue or the development of our products.

The development of uniform codes and standards for hydrogen fuel cell vehicles and related hydrogen refueling infrastructure may not develop in a timely fashion.

All fuels, including hydrogen, pose significant safety hazards and hydrogen vehicles have not yet been widely used under "real-world" driving conditions. To ensure that hydrogen fuels are handled in a safe manner, certain characteristics of hydrogen must be addressed.

The use of hydrogen as a vehicle fuel requires the establishment of appropriate codes and standards to ensure its safe use by the car-driving public. The development of these standards are being undertaken by numerous organizations, including the American National Standards Institute, American Society of Mechanical Engineers, European Integrated Hydrogen Project, International Code Council, International Standards Organization, National Fire Protection Association, National Hydrogen Association, and Society of Automotive Engineers. Given the number of organizations pursuing hydrogen and fuel cell codes and standards, it is not clear whether universally accepted codes and standards will result and, if so, when.

Although many organizations have identified as a significant priority the development of codes and standards, we cannot assure you that the resulting codes and standards would not materially affect our revenue or the commercialization of our products.

Provisions of Delaware law and of our charter and by-laws may make a takeover more difficult.

Provisions in our certificate of incorporation and by-laws and in the Delaware corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt that our

management and board of directors oppose. Public stockholders that might desire to participate in one of these transactions may not have an opportunity to do so. Our amended and restated certificate of incorporation and amended and restated by-laws contain the following types of provisions:

- establishing a staggered board of directors, which makes it difficult for stockholders to change the composition of the board of directors in any one year;
- reserving to our board of directors the exclusive right to change the number of directors and fill vacancies on our board of directors, which could make it more difficult for a third party to obtain control of our board of directors;
- authorizing the issuance of preferred stock which can be created and issued by the board of directors without prior stockholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of our common stock, which could make it more difficult of expensive for a third party to obtain voting control;
- establishing advance notice requirements for director nominations or other proposals at stockholder meetings;
- prohibiting stockholder action by written consent, which could delay a third party from acquiring us; and
- requiring the affirmative vote of holders of at lease 66⅔% of the outstanding voting stock to amend any provision in our certificate of incorporation or by-laws, and requiring the affirmative vote of 80% of the outstanding voting stock to amend certain provisions of our certificate of incorporation and by-laws, which could make it more difficult for a third party to remove the provisions we have included to prevent or delay a change of control.

These anti-takeover provisions could substantially impede the ability of public stockholders to benefit from a change in control or to change our management and board of directors.

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

Information relating to Quantitative and Qualitative Disclosures About Market Risk appear under the heading "Derivative Financial Instruments" which is included in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operation.

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

Our financial statements and supplementary data beginning on page F-1 of this Annual Report on Form 10-K are incorporated herein by reference.

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

None.

PART III

Item 10. ***Directors and Executive Officers***

The following table sets forth the names, ages and positions of the individuals who serve as our directors and executive officers:

Name	Age	Position
Alan P. Niedzwiecki	44	President; Chief Operating Officer; Director
Raymond W. Corbin	50	General Manager of GM Alternative Fuel Programs
Cathryn T. Johnston	36	Director of Business Operations; Secretary
Thomas K. Wiedmann	42	Vice President of Research and Development
Dale L. Rasmussen	52	Chairman of the Board; Director
Brian A. Runkel	40	Director
Scott Samuelsen	59	Director
Thomas J. Tyson	69	Director

Alan P. Niedzwiecki has served as our President and as one of our directors since February 2002. Mr. Niedzwiecki was appointed as our Chief Operating Officer in November 2001 and continues to serve in that position. From October 1999 to November 2001, Mr. Niedzwiecki served as our Executive Director of Business Development. From June 1989 to October 1999, Mr. Niedzwiecki was President and CEO of NGV Corporation, an engineering and marketing/commercialization consulting company. Mr. Niedzwiecki has more than 25 years of experience in the alternative fuels industry in product and technology development and commercialization relating to mobile, stationary power generation and refueling infrastructure solutions. Mr. Niedzwiecki is a graduate of Southern Alberta Institute of Technology, with a degree in Petroleum Engineering.

Raymond W. Corbin has served as our General Manager of General Motors Alternative Fuel Programs since February 2001. Mr. Corbin joined us in May 2001 as Director of General Motors Alternative Fuel Programs. From June 1974 until May 2001, Mr. Corbin worked for General Motors Powertrain and Calsonic-Kansei Corporation. He has over 30 years of automotive experience in engines, emission systems, powertrain, exhaust systems and manufacturing. Mr. Corbin holds a B.S. in Mechanical Engineering from Kettering University (formerly General Motors Institute).

Cathryn T. Johnston has served as our Director of Business Operations since June 2000 and became our Corporate Secretary in November 2000. From 1993 to June 2000, Ms. Johnston held various positions with IMPCO, including Manager of Business Administration, Manager of Program and Contracts Administration, and Program Administrator for OEM programs. Prior to joining IMPCO in 1993, Ms. Johnston held several business administration positions in a variety of industries, including the residential building industry and the non-profit sector. She has over 15 years of experience in business administration and operations positions. Ms. Johnston received a B.S. in Developmental Psychology from the University of California, Santa Barbara and an M.B.A. from the University of California, Irvine.

Thomas K. Wiedmann has served as our Vice President of Research and Development since February 2001. Mr. Wiedmann served as a member of our board of directors from February 2001 to February 2002. From June 1997 to February 2001, Mr. Wiedmann served as Director of Vehicle Platforms for IMPCO's automotive OEM division. Mr. Wiedmann joined IMPCO in 1984 and has held various key engineering positions covering vehicle propulsion, conventional and gaseous fuels and engine/powertrain control systems. Mr. Wiedmann received a B.S. in Engineering from Walla Walla College, Washington.

Dale L. Rasmussen has served as a member of our board of directors since October 2000 and was appointed as Chairman of the Board in February 2002. Since April 1984, Mr. Rasmussen has held various positions at IMPCO, including his current position as Senior Vice President and Secretary since June 1989, as well as Vice President of Finance and Administration. Prior to joining IMPCO, Mr. Rasmussen was a commercial banker for

12 years at banks that were acquired by Key Bank and U.S. Bank. He received a B.A. in Business Administration and Economics from Western Washington University and is a graduate of the Pacific Coast Banking School.

Brian A. Runkel became a director immediately prior to the distribution. Since June 1993 Mr. Runkel has served as President of Runkel Enterprises, an environmental consulting firm. Mr. Runkel also serves as Executive Director of the California Environmental Business Council, a non-profit trade and business association representing the California environmental technology and services industries. He received a B.A. in International Relations from George Washington University, and a J.D. from Harvard Law School.

Scott Samuelsen became a director immediately prior to the distribution. Since 1990, Dr. Samuelsen has been a professor of Mechanical and Aerospace Engineering at University of California, Irvine, where he serves as the Director of the National Fuel Cell Research Center. He also serves as Vice President of Energy Plus Ltd., an engineering consulting firm. Dr. Samuelsen holds B.S., M.S. and Ph.D. degrees in Mechanical Engineering from the University of California, Berkeley.

Thomas J. Tyson became a director immediately prior to the distribution. Mr. Tyson currently serves as an external consultant to GE Energy & Environmental Research Corp., a developer of advanced technologies to control nitrogen oxide emissions. Mr. Tyson served as Chief Executive Officer of Energy & Environmental Research Corp. until it was acquired by General Electric in 1999. From July 1999 to December 2001, Mr. Tyson served in various positions with GE Energy & Environmental Research Corp., including Chief Executive Officer and Director of Special Projects. Mr. Tyson received a M.S. in Nuclear Engineering from the University of California, Berkeley and holds a B.S. in Mechanical Engineering and a Ph.D. in Aeronautical Engineering from the California Institute of Technology.

There are no family relationships among any of our directors or executive officers.

Board of Directors

Our board of directors is comprised of five members. In accordance with our restated certificate of incorporation and amended and restated by-laws, the terms of office of our board of directors is divided into three classes as nearly equal in size as possible with staggered three-year terms: Class I, whose term will expire at the first annual meeting of stockholders held after the distribution, Class II, whose term will expire at the second annual meeting of stockholders, and Class III, whose term will expire at the third annual meeting of stockholders. The Class I director is Brian Runkel, the Class II directors are Scott Samuelson and Thomas Tyson, and the Class III directors are Alan Niedzwiecki and Dale Rasmussen. Pursuant to our strategic alliance with General Motors, we have agreed to appoint one individual nominated by General Motors to our board of directors. We also agreed that, during the term of our strategic alliance, we will continue to nominate one individual designated by General Motors to our proposed slate of directors to be presented to our stockholders as necessary for General Motors to retain one seat on our board of directors. During the term of our strategic alliance, General Motors will also be entitled to appoint a non-voting “ex-officio” board member. At each annual meeting of stockholders, beginning with the first annual meeting after the distribution, the successors to the directors whose terms will then expire will be elected to serve from the time of their election and qualification until the third annual meeting following their election or until their successors have been duly elected and qualified, or until their earlier resignation or removal. The classification of our board of directors could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, control of our company.

Committees of the Board of Directors

Compensation Committee. The members of our compensation committee are Messrs. Rasmussen, Runkel and Samuelsen. The compensation committee reviews and makes recommendations to our board of directors concerning salaries and incentive compensation for our directors, officers and employees. The compensation committee will also administer our 2002 Stock Incentive Plan.

Audit Committee. The members of our audit committee are Messrs. Runkel, Samuelsen and Tyson. The audit committee reviews our internal accounting and auditing procedures, reviews our audit and examination results and procedures, consults with our management and our independent accountants prior to the presentation of our financial statements to stockholders, and makes recommendations to the board of directors about selecting independent accountants.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our directors and executive officers, and persons who own more than 10% of our common stock to file with the Securities and Exchange Commission initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Executive officers, directors and greater than 10% stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) reports they file. To our knowledge, based solely on review of the copies of such reports furnished to us or advice that no filings were required, since the beginning of our 2002 fiscal year all executive officers, directors and greater than 10% beneficial owners complied with the Section 16(a) filing requirements, except that each of our current executive officers and directors filed a Form 3 one day late.

Item 11. Executive Compensation.

The following table sets forth information concerning the annual and long-term compensation for services rendered in all capacities to IMPCO and its subsidiaries for the fiscal years indicated for the individual who served as our Chief Executive Officer during the last completed fiscal year and the four other most highly compensated individuals who will serve as our executive officers. These individuals are referred to as the "named executive officers" in this Annual Report.

Summary Compensation Table

Name and Principal Position	Fiscal Year	Annual Compensation Salary(1)	Annual Compensation Bonus	Long-Term Compensation Awards Securities Underlying Options(2) (#)	All Other Compensation
Alan P. Niedzwiecki(3)	2002	$148,560	$ —	40,000	$10,521(4)
President and Chief Operating Officer	2001	130,764	5,000	7,500	20,155
	2000	67,896	4,100	0	33,729
Syed F. Hussain(5)	2002	281,097	—	—	12,135(6)
Former Chief Technology Officer	2001	250,962	194,200	40,000	12,135
	2000	203,846	49,000	10,000	12,198
Raymond W. Corbin(7)	2002	195,000	—	—	14,632(8)
General Manager of GM Alternative Fuel Programs	2001	184,725	11,000	5,000	18,526
Thomas K. Wiedmann	2002	175,000	—	—	16,336(9)
Vice President of Research and Development	2001	136,923	7,000	3,035	15,491
	2000	111,019	9,000	47	16,218

(1) Includes amounts deferred by executive officers pursuant to IMPCO's Employee Savings Plan and Deferred Compensation Plan.

(2) Consists of options granted under IMPCO's incentive option plans. In connection with our spin-off from IMPCO, each outstanding option to purchase IMPCO common stock was converted into an adjusted IMPCO option and an option to purchase the same number of shares of our common stock. For a description of these option adjustments, see "—Treatment of Outstanding IMPCO Options."

(3) Mr. Niedzwiecki joined our company during our 2000 fiscal year and was appointed as our President in February 2002.
(4) Includes a group term life insurance premium of $135, an automobile allowance of $8,400 and a matching contribution of $1,986 pursuant to the IMPCO Employee Savings Plan.
(5) Mr. Hussain served as our President and Chief Executive Officer until February 2002 and resigned from Quantum in April 2002.
(6) Includes a group term life insurance premium of $135 and an automobile allowance of $12,000.
(7) Mr. Corbin joined our company during our 2001 fiscal year.
(8) Includes a group term life insurance premium of $207, an automobile allowance of $8,400 and a matching contribution of $6,043 pursuant to the IMPCO Employee Savings Plan.
(9) Includes a group term life insurance premium of $90, an automobile allowance of $8,400, a matching contribution of $5,425 pursuant to the IMPCO Employee Savings Plan and a matching contribution of $2,421 pursuant to the IMPCO Deferred Compensation Plan.

The positions in the table above are the positions to be held by the named executive officers with us at the time of the distribution and were not necessarily the positions held by the named executive officers with IMPCO during the period or periods covered by the table.

Option Grants in Last Fiscal Year

The following table provides summary information regarding options to purchase IMPCO common stock granted to each of the named executive officers in fiscal 2002. No options to purchase Quantum common stock were granted to any named executive officers in fiscal 2002. In connection with our spin-off from IMPCO, each outstanding option to purchase IMPCO common stock was converted into an adjusted IMPCO option and an option to purchase the same number of shares of our common stock. For a description of these option adjustments, see "—Treatment of Outstanding IMPCO Options." No stock appreciation or stock purchase rights were granted in fiscal 2002.

	Individual Grants					
Name	Number of Securities Underlying Options Granted(1)	Percent of Total Options Granted to Employees in Fiscal Year(2)	Exercise Price Per Share(1)	Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(3)	
					5%	10%
Alan P. Niedzwiecki	40,000	17.3%	$11.00	12/14/11	$276,714	$701,247

(1) Options were granted at fair market value of IMPCO common stock on the date of grant and vest cumulatively at the rate of 40% after the first two years following the date of the grant and 20% each year thereafter so that the employee is 100% vested after five years. However, if employment terminates due to death or disability, retirement at or after age 62, or termination without cause, then options vest at the rate of 25% for each full calendar year of employment. Options may be exercised only while an optionee is employed by us or IMPCO, or within three months following termination of such employment. If termination results from death or disability, options may be exercised within one year of the termination date. In no event may options be exercised more than ten years after date of grant. In the event of a change of control, the board may in its sole discretion give all or certain optionees the right to exercise all or any portion of their unvested options. For a description of the adjustment of outstanding IMPCO options in connection with the distribution, please see "—Treatment of Outstanding IMPCO Options."
(2) Based on an aggregate of 231,000 options granted to IMPCO's employees, consultants and directors during the 2002 fiscal year.
(3) The 5% and 10% assumed annual rates of compounded stock price appreciation are mandated by rules of the Securities and Exchange Commission and do not represent our estimate or projection of our future common stock prices.

Aggregate Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table sets forth information concerning exercises of options to purchase IMPCO common stock during fiscal year 2002 and the value of unexercised options to purchase IMPCO common stock held by the named executive officers at the end of fiscal year 2002.

Name	Shares Acquired on Exercise(#)	Value Realized ($)(1)	Number of Securities Underlying Unexercised Options at Fiscal Year-End (#)		Value of Unexercised In-the-Money Options at Fiscal Year-End(2)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Alan P. Niedzwiecki	—	—	0	47,500	$ 0	$94,958
Syed F. Hussain	72,000	$408,525	0	0	0	0
Raymond W. Corbin	—	—	0	5,000	0	11,900
Thomas K. Wiedmann	13,491	102,011	43	7,098	56	29,207

(1) Calculated by determining the difference between the fair market value of the common stock underlying the options on the date each option was exercised and the exercise price of the options.

(2) Calculated by determining the difference between the fair market value of the common stock underlying the options on April 30, 2002 and the exercise price of the options.

Director Compensation

Each director who is not one of our employees will receive an attendance fee of $1,000, plus out-of-pocket expenses, for each board meeting he attends. In addition, board members acting as chairman for the audit, compensation and nominating committees will receive an annual fee of $3,000. Directors are eligible to participate in our stock plans. Option grants to directors are at the discretion of management, and we have no specific plans regarding amounts to be granted to our directors in the future.

Compensation Committee Interlocks and Insider Participation

Our compensation committee consists of Messrs. Rasmussen, Runkel and Samuelsen. None of our executive officers serves as a director or member of the compensation committee or other board committee performing equivalent functions of another entity that has one or more executive officers serving on the board of directors of our compensation committee.

Treatment of Outstanding IMPCO Options

On the distribution date, each outstanding option to purchase IMPCO common stock was converted into two options: an option to purchase the same number of shares of IMPCO common stock covered by the original IMPCO option and an option to purchase the same number of shares of our common stock. The exercise prices per share for each converted IMPCO option and Quantum option were adjusted in a manner so that:

- the aggregate "intrinsic value" (which is the market value of the stock underlying the option, less the exercise price of that option, multiplied by the number of shares then covered by that option) after the distribution of the converted IMPCO option plus the intrinsic value of the new Quantum option is not greater than the intrinsic value of the original IMPCO option immediately prior to the distribution;
- the ratio of the exercise price of the converted IMPCO option to the market value per share of IMPCO common stock after the distribution is not lower than the ratio of the exercise price of the original IMPCO option to the market value per share of IMPCO common stock immediately prior to the distribution; and
- the ratio of the exercise price of the new Quantum option to the market value per share of Quantum common stock after the distribution is not lower than the ratio of the exercise price of the original IMPCO option to the market value per share of IMPCO common stock immediately prior to the distribution.

The terms of each converted IMPCO option and each new Quantum option (other than the exercise price and the number of shares) remained substantially the same as the original IMPCO options from which they were converted, except that the converted IMPCO options were amended to allow for vesting based on the continuation of the holder's employment with either IMPCO or Quantum or their respective subsidiaries, as the case may be, and will give credit for continuous employment with IMPCO or Quantum or their respective subsidiaries prior to the distribution date. All of the Quantum options we issued in connection with the distribution were non-qualified stock options. The vesting of each new Quantum option is subject to the same vesting schedule as the original IMPCO option and continuation of the holder's employment with either IMPCO or Quantum or their respective subsidiaries, as the case may be, with credit given for continuous employment with IMPCO or Quantum or their respective subsidiaries, prior to the distribution date. The Quantum options we granted with respect to each original IMPCO option were issued under the our 2002 Stock Incentive Plan.

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

The following table sets forth information about the beneficial ownership of each class of our securities as of June 24, 2002. It shows shares beneficially owned by each of the following:

- each person or group of affiliated persons known by us to beneficially own more than 5% of each class of our outstanding securities;
- each of our directors;
- each of the named executive officers; and
- all current directors and executive officers as a group.

We have determined the beneficial ownership shown on this table in accordance with the rules of the Securities and Exchange Commission. Under those rules, if a person held options or warrants to purchase shares of our common stock that were currently exercisable or exercisable within 60 days of June 24, 2002, those shares are included in that person's reported holdings and in the calculation of the percentage of our common stock owned. Except as otherwise provided below, the percentage of beneficial ownership is based on 14,142,036 shares of our common stock outstanding as of July 24, 2002. To our knowledge, each person named in the table has sole voting and investment power over the shares listed by that person's name, except where we have shown otherwise in the footnotes or where community property laws affect ownership rights. Except where we show otherwise, the address of each of the persons in this table is: c/o Quantum Fuel Systems Technologies Worldwide, Inc., 17872 Cartwright Road, Irvine, California 92614.

	Series A Common Stock		Common Stock		Percent of Total Capital Stock(1)
Name of Beneficial Owner	**Number of Shares Owned**	**Percent**	**Number of Shares Owned**	**Percent**	
5% or Greater Stockholders:					
General Motors Corporation(2)	3,513,439(3)	100%	0	*	19.9%
Directors and Executive Officers:					
Dale L. Rasmussen	0	*	205,150(4)	1.4%	1.2%
Brian A. Runkel	0	*	0	*	*
Scott Samuelsen	0	*	0	*	*
Thomas J. Tyson	0	*	0	*	*
Syed F. Hussain	0	*	113,858		*
Alan P. Niedzwiecki	0	*	1,635(5)	*	*
Raymond W. Corbin	0	*	0	*	*
Thomas K. Wiedman	0	*	43(6)	*	*
All current directors and officers as a group	0	*	206,933(7)	1.5%	1.2%

(1) The percentage of total capital stock is based on a total of 17,655,475 shares of capital stock outstanding as of July 24, 2002, which assumes the conversion of all outstanding shares of Series A common stock into common stock on a one-for-one basis.

(2) The address of General Motors Corporation is 300 Renaissance Center, Detroit, Michigan 48265.
(3) Shares of Series A common stock will automatically convert into common stock on a one-for-one basis upon the closing of an initial public offering of our capital stock. For a detailed description of the rights and preferences of our Series A common stock, please see "Note 10—Stockholders' Equity" in the notes to the financial statements included elsewhere in this Annual Report.
(4) Includes 72,113 shares issuable upon exercise of outstanding options that are exercisable within 60 days after July 24, 2002.
(5) Includes 1,360 shares issuable upon exercise of outstanding options that are exercisable within 60 days after July 24, 2002.
(6) Represents 43 shares issuable upon exercise of outstanding options that are exercisable within 60 days after July 24, 2002.
(7) Includes an aggregate of 73,516 shares issuable upon exercise of outstanding options that are exercisable within 60 days after July 24, 2002.

Equity Compensation Plan Information

As of April 30, 2002, we had no options, warrants or other rights to purchase our securities under any compensation plans.

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

Prior to the distribution, each of our current executive officers served as an officer or employee of IMPCO and/or its other subsidiaries. In acting on our behalf, these officers considered not only the short-term and long-term impact of operating decisions on our business, but also the impact of such decisions on the business of IMPCO. One of our directors, Dale Rasmussen, remains employed by IMPCO and will continue to serve as IMPCO's Senior Vice President and Secretary.

During the 2002 fiscal year, we had revenue of $29,316 for products sold to IMPCO, and we purchased $156,041 in products from IMPCO.

Agreements with IMPCO

In connection with the contribution of assets by IMPCO to us, IMPCO also contributed $15 million in cash and assumed $8.6 million of our outstanding debt. In connection with the distribution, we entered into a Contribution and Distribution Agreement and several ancillary agreements with IMPCO that defines our ongoing relationship after the distribution and to allocate tax, employee benefits and certain other liabilities and obligations arising from periods prior to the distribution date. We entered into these agreements with IMPCO while we were still a wholly-owned subsidiary of IMPCO and, while we believe the terms of these agreements reflect arms' length transactions, these agreements may not be the same as would have been obtained through negotiations with an unaffiliated third party. Each of these agreements has been filed as exhibits to this Annual Report. The following description is only a summary and is qualified by reference to the filed exhibits.

Contribution and Distribution Agreement

We entered into a Contribution and Distribution Agreement with IMPCO which provides for, among other things, certain corporate transactions required to effect the distribution and other arrangements among us and IMPCO subsequent to the distribution. The agreement provided that IMPCO would transfer to us the assets constituting IMPCO's automotive OEM business. The agreement provides for, among other things, assumptions of liabilities and cross-indemnities designed to place financial responsibility on each of us and IMPCO for the liabilities of its respective business.

Under the agreement, if we or IMPCO act or fail to act in a manner which causes the distribution to fail to qualify under Section 355 of the Code or Section 355(e) of the Internal Revenue Code to apply to the distribution, we or IMPCO will indemnify the other for any tax liability arising from such failure or application.

The agreement also provides for a full release and discharge of all liabilities existing or arising from all acts and events occurring or failing to occur or alleged to have occurred or to have failed to occur and all conditions existing or alleged to have existed on or before the date of the agreement, between or among us or any of our subsidiaries or affiliates, on the one hand, and IMPCO or any of its subsidiaries or affiliates other than our company, on the other hand, except as expressly set forth in the agreement. The agreement also provides that, except as otherwise set forth therein or in any related agreement, all costs or expenses incurred in connection with the distribution and not paid prior to the distribution will be charged to and paid by us. Each party will pay its own expenses after the Distribution.

Employee Benefit Matters Agreement

We entered into an Employee Benefit Matters Agreement with IMPCO pursuant to which we agreed to create independent retirement and other employee benefit plans that are substantially similar to IMPCO's existing retirement and other employee benefit plans. Under the agreement and effective immediately after the distribution, IMPCO will transfer the assets and liabilities of its existing 401(k) retirement and other benefit plans related to our employees to the comparable Quantum benefit plans. Generally, following the distribution, IMPCO ceased to have any continuing liability or obligation to our current employees and their beneficiaries under any of IMPCO's benefit plans, programs or practices.

Pursuant to the Employee Benefit Matters Agreement, all IMPCO stock options that were outstanding on the record date and that had not been exercised prior to the distribution date were converted into two stock options: (1) an option to purchase the number of previously-unexercised IMPCO stock options as of the record date, and (2) an option to purchase a number of shares of our common stock equal to the number of previously-unexercised IMPCO stock options times a fraction, the numerator of which is the total number of shares of our common stock distributed to IMPCO stockholders in the distribution and the denominator of which is the total number of IMPCO shares outstanding on the record date for the distribution.

Tax Allocation and Indemnification Agreement

We and IMPCO entered into a Tax Allocation and Indemnification Agreement, which allocates tax liabilities between us and IMPCO and addresses certain other tax matters such as responsibility for filing tax returns and the conduct of audits and other tax proceedings for taxable periods before and after the distribution date. IMPCO will be responsible for and will indemnify us against all tax liabilities relating to the assets and entities that will constitute IMPCO and its subsidiaries, and we will be responsible for and will indemnify IMPCO against all tax liabilities relating to the assets and entities that will constitute our business. In addition, we generally will indemnify IMPCO for all tax liabilities arising if the contribution is not tax-free, other than tax liabilities arising in connection with the our assumption of certain IMPCO liabilities.

Transition Services Agreement

We entered into a Transition Services Agreement with IMPCO pursuant to which IMPCO will continue to provide us with various administrative services. These services consists of administrative services including employee benefits administration, affirmative action and immigration administration, and payroll processing. This agreement will terminate after a period of six months, but may be terminated earlier by either party as to specific services on certain conditions. We will pay fees to IMPCO for services provided in amounts based on IMPCO's loaded costs incurred in providing such services.

Strategic Alliance Agreement

We entered into a Strategic Alliance Agreement with IMPCO pursuant to which we will work with IMPCO in identifying and conducting research and development programs of mutual interest. As part of such research and development activities, we may develop, solely or jointly with IMPCO, technology that is owned solely by

us or jointly with IMPCO. The other purpose of this relationship is to provide IMPCO access to our advanced technologies, including the CNG storage tanks, fuel injectors, in-tank regulators and other products, for use in automotive, bus and truck and industrial aftermarket applications and in the bus and truck and industrial OEM markets.

Agreements with General Motors

We have entered into a strategic alliance with General Motors regarding the development of fuel cell systems. Under the terms of the strategic alliance, General Motors acquired shares of our Series A common stock representing 19.9% of our issued and outstanding capital stock following the distribution. We entered into the agreements described below with General Motors in connection with the alliance. These agreements have been filed as exhibits to this Annual Report. The following description is only a summary and is qualified by reference to the filed exhibits.

Corporate Alliance Agreement

The Corporate Alliance Agreement between us and General Motors serves to formalize our agreement to work together to advance and commercialize, on a global basis, fuel cell systems and the market for fuel cells to be used in transportation, mobile, stationary and portable applications. The Corporate Alliance Agreement became effective upon the distribution and has a term of ten years. The agreement provides that:

- General Motors is obligated to actively support, endorse and recommend us to its customer base;
- General Motors will assist and provide guidance with respect to our directed research and development of fuel cell applications;
- we will appoint one individual nominated by General Motors to our board of directors prior to or promptly after the distribution, and thereafter during the term of the agreement we will continue to nominate one individual designated by General Motors to our proposed slate of directors to be presented to our stockholders as necessary for General Motors to retain one seat on our board of directors;
- General Motors will be entitled to appoint an “ex officio” board member with non-voting capacity during the term of the agreement;
- we will provide minimum amounts of annual funding to projects approved under the alliance; and
- beginning three years after the effective date of the agreement, we will pay General Motors a percentage of gross revenues derived from sales of applications developed under the strategic alliance.

We retain the ownership of our existing technology and we and General Motors will jointly own technology that is jointly created under the alliance. We are free to use jointly created technologies in certain aspects of our business but will be required to share revenues with General Motors on fuel cell system-related products that are sold to General Motors or third parties. Under the agreement, General Motors has a right of first refusal in the event that we propose to sell, or otherwise transfer our fuel cell related intellectual property contemplated under the Corporate Alliance Agreement. In the event that we decide to discontinue operations or are deemed insolvent, General Motors has the right to purchase the intellectual property contemplated under the Corporate Alliance Agreement at a price to be determined by an independent appraisal firm approved by both us and General Motors.

Stock Transfer Agreement

We entered into a Stock Transfer Agreement pursuant to which we agreed to issue to General Motors shares of our Series A Common Stock representing 19.9% of our total issued and outstanding capital stock after the distribution. We issued the Series A common stock immediately following the distribution. The Series A Common Stock will automatically convert into common stock upon the closing of an initial public offering of our stock. We also agreed that, subject to limited exceptions, we would not issue any stock in a private placement transaction without the prior written consent of General Motors.

Registration Rights Agreement

We entered into a Registration Rights Agreement with General Motors pursuant to which General Motors may demand that we file a registration statement under the Securities Act covering some or all of General Motors' common stock into which the Series A common stock is convertible. General Motors may make this demand any time after the earlier of three years following the distribution or six months after the effective date of our first registration statement for a public offering of our securities to the general public. We are not required to effect more than two demand registrations nor are we required to effect a registration if the requested registration would have an aggregate offering price to the public of less than $20 million. In an underwritten offering, the managing underwriter of any such offering has the right, to limit the number of registrable securities to be included in the registration statement.

General Motors will also have "piggyback" registration rights. If we propose to register any of our equity securities under the Securities Act other than pursuant to the demand registration rights described above or certain excluded registrations, General Motors may require us to include all or a portion of its registrable securities in the registration and in any related underwriting. Further, if we are eligible to effect a registration on Form S-3, General Motors may demand that we file a registration statement on Form S-3 covering all or a portion of its registrable securities, provided that the registration has an aggregate offering price of $10 million. We will not be required to effect more than two such registrations in any 12 month period. In general, we will bear all fees, costs and expenses of such registrations, other than underwriting discounts and commissions. We also agreed to take such reasonable actions as are necessary to make Rule 144 available to General Motors for the resale of its registrable securities without registration under the Securities Act.

Master Technical Development Agreement

Under the terms of the Master Technical Agreement with General Motors, we have agreed to work with General Motors to facilitate the integration, interface, and optimization of General Motors' fuel cell systems with our gaseous fuel storage and handling modules. To that end, the agreement provides for the establishment of joint Quantum/General Motors technical teams to implement statements of work with respect to the development of fuel cell applications. In addition, the agreement provides that both we and General Motors will license our fuel cell related technologies to each other for the purpose of developing, manufacturing and selling the fuel cell applications developed under our strategic alliance.

PART IV

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

(a) Documents filed as part of this report:

(1) Financial Statements:

(2) Supplemental Financial Statement Schedules:

Unaudited Pro Forma Financial Data:

All other schedules are omitted because the information is not applicable or is not material, or because the information is included in the financial statements or the notes thereto.

(3) *Exhibits:*

Exhibit Number	Description
2.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (filed as Exhibit 10.1 hereto)
3.1	Amended and Restated Certificate of Incorporation of the Registrant
3.2	Amended and Restated By-laws of the Registrant
4.1	Specimen Common Stock Certificate (previously filed as Exhibit 4.1 to the Registrant's Registration on Form 10 (File No. 0-49629) and incorporated herein by reference)
10.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.2	Tax Allocation and Indemnification Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.3	Transition Services Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.4	Employee Benefit Matters Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.5	Strategic Alliance Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.6	Quantum Fuel Systems Technologies Worldwide, Inc. 2002 Stock Incentive Plan (filed as Exhibit 10.1 to the Registrant's Registration Statement on Form S-8 (No. 333-96923) on July 23, 2002, and incorporated herein by reference)*

Exhibit Number	Description
10.7†	Corporate Alliance Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.8	Master Technical Development Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.9	Stock Transfer Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.10	Registration Rights Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.11	Lease between Klein Investments, Family Limited Partnership, as Lessor, and IMPCO Technologies, Inc. as Lessee, dated August 18, 1997(2)
10.12	Lease dated as of March 31, 2000 by and between IMPCO Technologies, Inc. and Braden Court Associates(3)
10.13	Memorandum of Understanding and Teaming Agreement, dated May 22, 2000 between IMPCO Technologies, Inc. and ATK Thiokol Propulsion (previously filed as Exhibit 10.14 to the Registrant's Registration on Form 10 (File No. 0-49629) and incorporated herein by reference)
10.14	Amendment Nos. 1, 2 and 3 to Memorandum of Understanding and Teaming Agreement, among the Registrant, IMPCO Technologies, Inc. and ATK Thiokol Propulsion
10.15	First Amendment to Corporate Alliance Agreement, dated as of July 19, 2002, between the Registrant and General Motors
10.16	First Amendment to Stock Transfer Agreement, dated as of July 19, 2002, between the Registrant and General Motors
10.17	Amendment to Lease Agreement, dated October 18, 2000, among, the Registrant, IMPCO Technologies, Inc. and Braden Court Associates
10.18	Amendment to Lease Agreement, dated October 31, 2000, among the Registrant, IMPCO Technologies, Inc. Klein Investments Family Limited Partnership
21.1	Subsidiaries of the Registrant
23.1	Consent of Ernst & Young LLP, Independent Auditors

† Certain information in this exhibit has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been granted with respect to the omitted portions.

* The referenced exhibit is a compensatory contract, plan or arrangement.

(1) Incorporated by reference to Amendment No. 1 to the Registration Statement on Form S-3 (No. 333-63726) of IMPCO Technologies, Inc., filed with the Commission on July 9, 2001.

(2) Incorporated by reference to the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 1998.

(3) Incorporated by reference to the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 2000.

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

No reports on Form 8-K were filed during the fourth quarter of fiscal year 2002.

INDEX TO FINANCIAL STATEMENTS

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Quantum Fuel Systems Technologies Worldwide, Inc.

We have audited the accompanying balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. (a wholly owned subsidiary of IMPCO Technologies, Inc.) as of April 30, 2001 and 2002, and the related statements of operations, changes in invested equity, and cash flows for each of the three years in the period ended April 30, 2002. Our audits also included the financial statement schedule listed in the Index at Item 14(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Quantum Fuel Systems Technologies Worldwide, Inc. at April 30, 2001 and 2002, and the results of its operations and its cash flows for each of the three years in the period ended April 30, 2002, in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ ERNST & YOUNG LLP

Long Beach, California
July 18, 2002
except for the 1st paragraph of Note 1,
as to which the date is July 23, 2002

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

BALANCE SHEETS

	Year Ended April 30		Proforma at April 30, 2002
	2001	2002	(unaudited)
ASSETS			
Current assets:			
Cash	$ 4,300	$ 177,414	$15,180,927
Accounts receivable less $40,000 allowance for doubtful accounts for each period	9,691,197	4,494,328	4,494,328
Inventories	9,125,998	9,626,616	9,626,616
Other current assets	1,157,590	87,713	87,713
Total current assets	19,979,085	14,386,071	29,389,584
Equipment and leasehold improvements, net	12,701,624	13,419,353	13,419,353
Intangible asset	—	—	14,000,000
Other assets	134,779	354,000	354,000
Total assets	$32,815,488	$28,159,424	$57,162,937
LIABILITIES AND INVESTED EQUITY			
Current liabilities:			
Accounts payable	$ 6,673,095	$ 6,761,294	$ 6,761,294
Other accrued liabilities	1,872,663	2,186,396	2,186,396
Line of credit	—	8,625,000	—
Current maturities of capital leases	95,345	188,832	188,832
Total current liabilities	8,641,103	17,761,522	9,136,522
Capital lease obligations, less current portion	182,778	127,355	127,355
Commitments and contingencies			
Invested and stockholders' equity			
Invested equity	23,991,607	10,270,447	—
Common stock, par value $0.001 per share, 42,000,000 shares authorized, 1,000 shares issued and outstanding at April 30, 2002	—	1	—
Additional paid in capital relating to common stock	—	99	—
Invested and stockholders' equity	23,991,607	10,270,547	—
Proforma stockholders' equity (unaudited):			
Preferred stock, par value $0.001 per share, 20,000,000 shares authorized, none issued			—
Series A common stock, par value $0.001 per share, 12,000,000 shares authorized, pro forma 3,513,439 shares issued and outstanding			3,513
Series B common stock, par value $0.001 per share, no shares authorized and issued (historical), 6,000,000 shares authorized (pro forma), 0 shares issued and outstanding (pro forma)			—
Common stock, par value $0.001 per share, 42,000,000 shares authorized, proforma 14,142,036 shares issued and outstanding			14,142
Additional paid in capital relating to common stock			47,881,405
Proforma total stockholders' equity (unaudited)			47,899,060
Total liabilities and invested equity	$32,815,488	$28,159,424	$57,162,937

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

STATEMENTS OF OPERATIONS

	April 30		
	2000	**2001**	**2002**
Net revenue:			
Product sales	$ 13,056,901	$ 15,447,389	$ 15,458,529
Contract revenue	9,283,877	7,910,540	7,944,766
Total revenue	22,340,778	23,357,929	23,403,295
Costs and expenses:			
Cost of product sales	15,081,039	19,452,343	25,581,284
Research and development	12,956,426	26,686,691	32,656,683
Selling, general and administrative	4,938,612	7,458,991	8,063,421
Total costs and expenses	32,976,077	53,598,025	66,301,388
Operating loss	(10,635,299)	(30,240,096)	(42,898,093)
Interest expense	—	4,167	488,442
Other income	—	—	9,555
Income Tax	—	—	800
Net loss	$(10,635,299)	$(30,244,263)	$(43,377,780)
Pro forma net loss (unaudited)			$(44,777,780)
Pro forma basic and diluted loss per share (unaudited)			$ (2.54)
Pro forma number of shares used in the basic and diluted per share calculation (unaudited)			17,655,475

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

STATEMENTS OF CHANGES IN INVESTED EQUITY

	Year Ended April 30		
	2000	**2001**	**2002**
Balance at beginning of period	$ 15,865,579	$ 19,357,363	$ 23,991,607
Net transfers from IMPCO	14,127,083	34,878,507	29,656,620
Net loss	(10,635,299)	(30,244,263)	(43,377,780)
Balance at end of period	$ 19,357,363	$ 23,991,607	$ 10,270,447

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

STATEMENTS OF CASH FLOWS

	Year Ended April 30		
	2000	**2001**	**2002**
Operating activities			
Net loss	$(10,635,299)	$(30,244,263)	$(43,377,780)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,217,438	1,687,401	2,903,036
Non-cash restructuring charge	—	—	277,760
Changes in operating assets and liabilities:			
Accounts receivable	(1,626,001)	(459,439)	5,196,869
Inventories	(2,263,361)	(393,395)	(500,618)
Other assets	(237,888)	(853,633)	850,656
Accounts payable	1,291,122	3,416,929	88,199
Accrued liabilities	18,501	1,087,652	35,973
Net cash used in operating activities	(12,235,488)	(25,758,748)	(34,525,905)
Investing activities			
Proceeds from sale of equipment and leasehold improvements	—	50,089	77,785
Purchases of equipment and leasehold improvements	(1,890,827)	(9,146,546)	(3,471,134)
Cash used in investing activities	(1,890,827)	(9,096,457)	(3,393,349)
Financing activities			
Payments on capital lease obligations	—	(20,770)	(189,352)
Borrowing under line of credit	—	—	8,625,000
Net advances from parent	14,127,083	34,878,507	29,656,720
Net cash provided by financing activities	14,127,083	34,857,737	38,092,368
Net increase in cash	768	2,532	173,114
Cash at beginning of year	1,000	1,768	4,300
Cash at end of year	$ 1,768	$ 4,300	$ 177,414
Supplemental schedule of non-cash activity			
Assets acquired under capital leases	$ —	$ 298,893	$ 227,415

See accompanying notes.

1. Background and Basis of Presentation

Background

On July 23, 2002, IMPCO Technologies, Inc. (IMPCO) completed the distribution and spin-off of Quantum Fuel Systems Technologies Worldwide, Inc. (the Company) to its stockholders. The Company is focusing on enabling technologies for alternative propulsion and energy in emerging global markets. The Company provides hydrogen and compressed natural gas (CNG) handling and storage system technologies to manufacturers of fuel cell and internal combustion engines.

On October 13, 2000, the Company was incorporated in Delaware as a wholly owned subsidiary of IMPCO. On the date of the distribution and spin-off, IMPCO distributed the stock of the Company to stockholders' of IMPCO based on a distribution ratio of one share of the Company's common stock for every share of IMPCO common stock outstanding on the record date. The Company's authorized capital stock consists of 20,000,000 shares of preferred stock, par value $0.001 per share, no shares issued and outstanding and 60,000,000 shares of common stock, par value $0.001 per share, 17,655,475 shares issued and outstanding. Of the 60,000,000 authorized shares of common stock, 12,000,000 are designated as Series A common stock and 6,000,000 are designated as Series B common stock. Pro forma loss per share for the year ended April 30, 2002 has been computed based on the number of shares distributed on the distribution date and gives effect to the issuance of 3,513,439 shares of the Company's Series A common stock immediately following the distribution and the corresponding amortization expense arising from the related intangible asset (see note 6). No employee stock options were included in the computation of pro forma diluted loss per share because their inclusion would be anti-dilutive to the net loss.

The pro forma balance sheet at April 30, 2002 gives effect to the distribution to IMPCO's stockholders of 14,142,036 shares of common stock in connection with the distribution, the issuance of 3,513,439 shares of the Company's Series A common stock to General Motors, the infusion of approximately $15 million in cash from IMPCO and the assumption by IMPCO of the Company's debt facility of approximately $8.6 million (see Notes 6 and 7).

Basis of Presentation

The financial statements include the Company, as well as certain assets, liabilities, and related operations that were transferred to the Company (the Contribution) from IMPCO. The financial statements include the historical operations to be transferred to the Company by IMPCO (the Company's Businesses). The Contribution was completed prior to the distribution and resulted in a recapitalization of the Company.

The financial statements have been derived from the financial statements and accounting records of IMPCO using the historical results of operations and historical basis of the assets and liabilities of the Company's Businesses. Management believes the assumptions underlying the financial statements are reasonable. However, the financial statements included herein may not necessarily reflect the Company's results of operations, financial position and cash flows in the future or what its results of operations, financial position and cash flows would have been had the Company been a stand-alone company during the periods presented.

The financial statements include allocations of certain IMPCO corporate headquarters' assets, liabilities, and expenses relating to the Company's Businesses that were transferred to the Company from IMPCO. General corporate overhead has been allocated either based on the ratio of the Company's headcount to IMPCO's total headcount, on the Company's revenue as a percentage of IMPCO's total revenue, or specifically identified costs for the Company. General corporate overhead primarily includes salary and expenses for the executive

management, finance, legal, human resources, information services and investor relations departments and amounted to approximately $2,126,000, $3,117,000 and $3,209,000 in 2000, 2001 and 2002, respectively. Management believes the costs of these services charged to the Company are a reasonable representation of the costs that would have been incurred if the Company had performed these functions as a stand-alone company. Following the Contribution, the Company will perform these functions using its own resources or purchased services.

The financial statements also include an allocation from IMPCO to fund a portion of the costs of research conducted by the Company. This allocation was based on management's determination of which corporate projects were related to the specific intellectual property that will be transferred to the Company as part of the contribution. This allocation amounted to approximately $7,050,000, $5,601,000 and $0 for fiscal 2000, 2001 and 2002, respectively. Beginning in fiscal year 2002, the Company satisfied its research requirements using its own resources or through purchased services.

IMPCO used a centralized approach to cash management and the financing of its operations. Cash deposits from the Company's Businesses were transferred to IMPCO on a regular basis and were netted against the owner's net investment account. As a result, none of IMPCO's cash or debt at the corporate level has been allocated to the Company in the financial statements. Changes in invested equity represented any funding required from IMPCO for working capital, acquisition or capital expenditure requirements after giving effect to the Company's transfers to or from IMPCO of its cash flows from operations. Until May 2001, the Company had been funded by IMPCO with no debt obligations being transferred to the Company except for capital leases.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. This basis of accounting contemplates the recovery of the Company's assets and the satisfaction of its liabilities in the normal course of conducting business. The Company uses cash generated from IMPCO's operations, bank financings and investments to fund capital expenditures and research and development, as well as to invest in and operate existing operations and new businesses. In July 2000, IMPCO completed an equity offering in which it received $53.5 million. Until fiscal year 2002, the Company was funded entirely from IMPCO in the form of equity investments. In fiscal year 2002, the Company and IMPCO were co-borrowers of a $12 million Bank of America debt facility. Prior to the distribution, IMPCO made an additional capital investment of $23.6 million into the Company, which consisted of the assumption of the $8.6 million outstanding under the debt facility plus a cash infusion of $15 million.

It is currently anticipated that the Company will require additional sources of financing in order to capitalize on opportunities that management believes to exist in the emerging fuel cell market. These additional sources of financing may include bank borrowings or public or private offerings of equity or debt securities. No assurance can be given that such additional sources of financing will be available on acceptable terms, if at all. Without the additional financing, the Company will be required to delay, reduce the scope of and eliminate one or more of its research and development projects; significantly reduce its capital expenditures; and/or retrench its efforts to meeting short-term production goals. Management believes its available working capital following the distribution will be sufficient to fund its plan operations through April 30, 2003.

Interest Expense

The Company's financial statements include interest expense totaling $0, $4,167 and $488,442 in 2000, 2001 and 2002, respectively. Until 2001, the Company was funded entirely through investments from IMPCO, who for a significant portion of that period funded the Company from its operations or equity proceeds. It was management's intention of both companies that these advances were interest-free and would never be repaid. These advances were forgiven as part of the Distribution. The interest expense reflected in the statement of

operations is due to the Company's capital lease obligations and, for the fiscal year ending April 30, 2002, debt specifically entered into by the Company. Below is the detailed schedule of IMPCO's Invested Equity (in thousands).

	Year Ended April 30		
	2000	2001	2002
Balance at beginning of period	$ 15,866	$ 19,357	$ 23,992
Allocation of Costs from IMPCO	2,126	3,117	3,209
Net Intercompany Purchases (Sales)	232	76	127
Cash Transfers from IMPCO	11,768	31,686	26,320
Net loss	(10,635)	(30,244)	(43,378)
Balance at end of period	$ 19,357	$ 23,992	$ 10,270
Average balance	$ 18,946	$ 22,825	$ 16,664

Income Taxes

The Company's income taxes are calculated on a separate tax return basis. However, IMPCO was managing its tax position for the benefit of its entire portfolio of businesses, and its tax strategies are not necessarily reflective of the tax strategies that the Company would have followed or will follow as a stand-alone entity.

2. Summary of Significant Accounting Policies

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates include an allocation of costs by IMPCO, assessing the collectability of accounts receivable, the use and recoverability of inventory, the realization of deferred tax assets, useful lives for depreciation periods of tangible assets, provisions for warranty claims, among others. The markets for the Company's products are characterized by competition, technological development and new product introduction, all of which could impact the future realizability of the Company's assets. Actual results could differ from those estimates.

Revenue Recognition

Revenue is recognized on product sales when goods are shipped in accordance with the Company's shipping terms. Contract revenue for customer funded research and development is principally recognized by the percentage of completion method. Amounts expected to be realized on contracts are based on the Company's estimates of total contract value and costs at completion. These estimates are reviewed and revised periodically throughout the lives of the contracts. Percentage of completion is determined based on costs incurred as a percentage of total estimated costs at completion. Also, the Company includes the costs of shipping and handling, when incurred, in cost of goods sold.

Research and Development Costs

Research and development costs are charged to expense as incurred. This line item includes an allocation from IMPCO for the costs of research conducted by IMPCO (see Note 1). Equipment used in research and

development with alternative future uses is capitalized and only the current period depreciation is charged to research and development.

Financial Instruments and Concentration of Credit Risk

The estimated fair values of cash, accounts receivable, accounts payable, and accrued expenses approximate their carrying value because of the short-term maturity of these instruments.

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of trade receivables. The Company conducts a major portion of its business with a limited number of customers. For the past three years and for the foreseeable future, General Motors Corporation (and subsidiaries of General Motors) represents a significant portion of the Company's sales and outstanding accounts receivable. Credit is extended based upon an evaluation of each customer's financial condition, with terms consistent with those present throughout the industry. Typically, the Company does not require collateral from customers.

The Company may use derivative financial instruments for the purpose of reducing its exposure to adverse fluctuations in interest and foreign exchange rates. While these hedging instruments could be subject to fluctuations in value, such fluctuations are generally offset by the value of the underlying exposures being hedged. The Company has not had any derivative financial instruments for any of the periods reported. The Company is not a party to leveraged derivatives and does not hold or issue financial instruments for speculative purposes.

Cash and Cash Equivalents

All highly liquid investments with original maturities of three months or less are considered to be cash equivalents.

Inventories

Inventories are valued at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method while market is determined by replacement cost for raw materials and parts and net realizable value for work-in-process and finished goods. The Company's business is subject to the risk of technological and design changes. The Company provides for obsolete or slow-moving inventory based on management's analysis of inventory levels and future sales forecasts at the end of each accounting period.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are stated at historical cost. Depreciation of equipment is determined using a straight-line method over the assets' estimated useful lives ranging from three to seven years. Amortization of leasehold improvements, and equipment financed by the Company's capital lease facility or capital expenditure facility, is provided using the straight-line method over the shorter of the assets' estimated useful lives or the lease terms.

Major renewals and improvements are capitalized and minor replacements, maintenance and repairs are charged to current operations as incurred. Upon retirement or disposal of assets, the cost and related accumulated depreciation are removed from the balance sheets and any gain or loss is reflected in the statements of operations.

Warranty Costs

Estimated future warranty obligations related to certain products are provided by charges to operations on a per unit sold accrual rate in the period in which the related revenue is recognized. Estimates are based, in part, on historical experience.

Impairment of Long-Lived Assets

In accordance with Financial Accounting Standards Board (FASB) Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of," impairment losses are recorded on long-lived assets used in operations when an indicator of impairment (significant decrease in market value of an asset, significant change in extent or manner in which the asset is used or significant physical change to the asset) is present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. The Company has not experienced any significant changes in the business climate or in the use of assets that would require the Company to write-down the value of the assets recorded in the balance sheet.

Income Taxes

Historically, the Company's operations have been included in IMPCO's consolidated income tax returns. Income tax expense in the Company's financial statements has been calculated on a separate tax return basis. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities.

Deferred tax assets and liabilities are determined based on the differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

Stock-Based Compensation

In October 1995, the Financial Accounting Standards Board issued SFAS No. 123 "Accounting for Stock Based Compensation," which established accounting and reporting standards for stock based compensation plans effective after fiscal year 1996. SFAS 123 encourages entities to adopt the fair value based method of accounting; however, it also allows an entity to continue to measure compensation cost using the intrinsic value based method prescribed by Accounting Principles Board No. 25. Such entities who elect to remain on the "intrinsic value based" method must make certain pro forma disclosures as if the new fair value method had been applied. At this time, the Company has not adopted the recognition provision of SFAS 123, but has provided pro forma disclosures (see Note 10).

Comprehensive Loss

Comprehensive loss would include, in addition to net loss, unrealized gains and losses excluded from the statements of operations and would be recorded directly into a separate section of invested equity on the balance sheet. These unrealized gains and losses are referred to as other comprehensive loss items. The Company had no items of other comprehensive loss, and hence there is no difference between the reported net loss and the comprehensive loss during the years ended April 30, 2000, 2001 and 2002.

Recently Issued Accounting Pronouncements

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets (FAS 144), which

addresses financial accounting and reporting for the impairment or disposal of long-lived assets and supersedes SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of, and the accounting and reporting provisions of APB Opinion No. 30, Reporting the Results of Operations for a disposal of a segment of a business. FAS 144 is effective for fiscal years beginning after December 15, 2001, with earlier application encouraged. We expect to adopt FAS 144 as of May 1, 2002 and do not expect that the adoption of the Statement will have a significant impact on our financial position and results of operations.

In June 2001, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 141, Business Combinations, and No. 142, Goodwill and Other Intangible Assets, effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests in accordance with the Statements. Other intangible assets will continue to be amortized over their useful lives. The Company expects to adopt FAS 141 as of May 1, 2002 and does not expect that the adoption of the Statement will have a significant impact on its financial position and results of operations.

3. Related Party Transactions

For the years 2000, 2001, and 2002, respectively, the Company had $48,609, $19,467 and $29,316 of revenue for products sold to IMPCO. For the years 2000, 2001, and 2002, respectively, the Company had $280,803, $95,683 and $156,041 of products purchased from IMPCO. In connection with the Contribution and Distribution, the Company and IMPCO executed the Contribution and Distribution Agreement (the Contribution and Distribution Agreement), and certain related agreements that are summarized below. This summary is qualified in all respects by the terms of the Contribution and Distribution Agreement and such related agreements.

Prior to the distribution, each of the Company's current executive officers served as an officer or employee of IMPCO and/or its other subsidiaries. In acting on the Company's behalf, these officers considered not only the short-term and long-term impact of operating decisions on the Company's business, but also the impact of such decisions on the business of IMPCO. One of the Company's directors remains employed by IMPCO and will continue to serve as IMPCO's Senior Vice President and Secretary.

Contribution and Distribution Agreement

The Company and IMPCO entered into a Contribution and Distribution Agreement which provides for, among other things, certain corporate transactions required to effect the distribution and other arrangements among IMPCO and the Company subsequent to the distribution. The agreement provided that IMPCO would transfer to the Company the assets constituting IMPCO's automotive OEM business. The agreement provides for, among other things, assumptions of liabilities and cross-indemnities designed to place financial responsibility on each of the Company and IMPCO for the liabilities of its respective business.

Under the agreement, if the Company or IMPCO acts or fails to act in a manner which causes the distribution to fail to qualify under Section 355 of the Code or Section 355(e) of the Internal Revenue Code to apply to the distribution, the Company or IMPCO will indemnify the other for any tax liability arising from such failure or application.

The agreement also provides for a full release and discharge of all liabilities existing or arising from all acts and events occurring or failing to occur or alleged to have occurred or to have failed to occur and all conditions existing or alleged to have existed on or before the date of the agreement, between or among the Company or any of its subsidiaries or affiliates, on the one hand, and IMPCO or any of its subsidiaries or affiliates other than the

Company, on the other hand, except as expressly set forth in the agreement. The agreement also provides that, except as otherwise set forth therein or in any related agreement, all costs or expenses incurred in connection with the Distribution and not paid prior to the Distribution will be charged to and paid by Quantum. Each party will pay its own expenses after the Distribution.

Employee Benefit Matters Agreement

The Company entered into an Employee Benefit Matters Agreement with IMPCO pursuant to which the Company agreed to create independent retirement and other employee benefit plans that are substantially similar to IMPCO's existing retirement and other employee benefit plans. Under the agreement and effective immediately after the distribution, IMPCO will transfer the assets and liabilities of its existing 401(k) retirement and other benefit plans related to the Company's employees to the comparable Quantum benefit plans. Generally, following the distribution, IMPCO ceased to have any continuing liability or obligation to the Company's current employees and their beneficiaries under any of IMPCO's benefit plans, programs or practices.

Pursuant to the Employee Benefit Matters Agreement, all IMPCO stock options that were outstanding on the record date and that had not been exercised prior to the distribution date were converted into two stock options: (1) an option to purchase the number of previously-unexercised IMPCO stock options as of the record date, and (2) an option to purchase a number of our common stock equal to the number of previously-unexercised IMPCO stock options times a fraction, the numerator of which is the total number of shares of our common stock distributed to IMPCO stockholders in the distribution and the denominator of which is the total number of IMPCO shares outstanding on the record date for the distribution.

Tax Allocation and Indemnification Agreement

The Company and IMPCO entered into a Tax Allocation and Indemnification Agreement, which allocates tax liabilities between the Company and IMPCO and addresses certain other tax matters such as responsibility for filing tax returns and the conduct of audits and other tax proceedings for taxable periods before and after the distribution date. IMPCO will be responsible for and will indemnify the Company against all tax liabilities relating to the assets and entities that will constitute IMPCO and its subsidiaries, and the Company will be responsible for and will indemnify IMPCO against all tax liabilities relating to the assets and entities that will constitute the Company's business. In addition, the Company generally will indemnify IMPCO for all tax liabilities arising if the contribution is not tax-free, other than tax liabilities arising in connection with the Company's assumption of certain IMPCO liabilities.

Transition Services Agreement

The Company entered into a Transition Services Agreement with IMPCO pursuant to which IMPCO will continue to provide the Company with various administrative services. These services consists of administrative services including employee benefits administration, affirmative action and immigration administration, and payroll processing. This agreement will terminate after a period of six months, but may be terminated earlier by either party as to specific services on certain conditions. The Company will pay fees to IMPCO for services provided in amounts based on IMPCO's loaded costs incurred in providing such services.

Strategic Alliance Agreement

The Company entered into a Strategic Alliance Agreement with IMPCO pursuant to which the Company will work with IMPCO in identifying and conducting research and development programs of mutual interest. As part of such research and development activities, the Company may develop, solely or jointly with IMPCO,

technology that is owned solely by the Company or jointly with IMPCO. The other purpose of this relationship is to provide IMPCO access to the Company's advanced technologies, including the CNG storage tanks, fuel injectors, in-tank regulators and other products, for use in automotive, bus and truck and industrial aftermarket applications and in the bus and truck and industrial OEM markets.

4. Inventories

Inventories consist of the following:

	Year Ended April 30	
	2001	2002
Inventories:		
Materials and parts	$ 8,725,294	$ 8,483,374
Work-in-process	247,048	206,921
Finished goods	1,210,565	3,467,262
	10,182,907	12,157,557
Less provision for obsolescence	1,056,909	2,530,941
Net inventories	$ 9,125,998	$ 9,626,616

5. Equipment and Leasehold Improvements

Equipment and leasehold improvements consist of the following:

	Year Ended April 30	
	2001	2002
Equipment and leasehold improvements:		
Dies, molds and patterns	$ 1,663,548	$ 2,676,538
Machinery and equipment	3,966,211	6,462,513
Office furnishings and equipment	3,338,192	7,145,671
Automobiles and trucks	121,980	121,979
Leasehold improvements	1,570,753	2,460,714
Capitalized machinery and equipment	395,803	623,358
Construction in progress	7,016,661	1,967,735
	18,073,148	21,458,508
Less accumulated depreciation and amortization	5,371,524	8,039,155
Net equipment and leasehold improvements	$12,701,624	$13,419,353

Equipment and leasehold improvements with a net book value of $209,000 and $0 at April 30, 2001 and 2002, respectively, are located outside of the United States.

6. General Motors Relationship

On June 12, 2001, IMPCO announced a strategic alliance between the Company and General Motors (GM) in which GM would acquire an equity position the Company. The strategic alliance with GM became effective upon completion of the Distribution. Under the alliance, GM will promote the Company as a recommended provider of hydrogen storage, hydrogen handling and associated electronic controls that meet OEM requirements. Additionally, the Company and GM will co-develop technologies that will aid in more rapid commercialization of fuel cell applications. Furthermore, this experience will position the Company to be able to address the

stationary power generation and portable power generation markets. Upon effectiveness of the strategic alliance, GM acquired Series A common stock representing 19.9% of the Company's outstanding capital stock in consideration of a nominal cash contribution and access to certain GM's proprietary information. The Company has committed to provide minimum amounts of annual funding to projects approved under the alliance, which the Company has exceeded in all of the past three years. The agreement calls for revenue sharing payments, which do not commence until three years after the effective date of the agreement, on gross revenues from certain applications. Each party retains the ownership of its existing technology and will jointly own technology that is jointly created under the alliance. The Company will be free to use jointly created technologies in certain aspects of the Company's business but will be required to share revenues with GM on fuel cell system-related products that are sold to GM or third parties. Pursuant to the strategic alliance with General Motors, the Company agreed to appoint one individual nominated by General Motors to the Company's board of directors prior to the distribution. The Company also agreed that, during the term of the strategic alliance, the Company will continue to nominate one individual designated by General Motors to the proposed slate of directors to be presented to the Company's stockholders as necessary for General Motors to retain one seat on the Company's board of directors. During the term of the strategic alliance, General Motors will also be entitled to appoint a non-voting "ex-officio" board member.

The value of the Series A common stock issued to General Motors after the completion of the Distribution represents the access to certain of General Motors' proprietary information obtained in connection with the strategic alliance and will be recorded at the fair value of the Series A common shares issued at the date of distribution. The issuance of the Series A common stock to General Motors has an expected market value on the date of the distribution of approximately $14 million, in accordance with Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation," and EITF 96-18, "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services." The intangible asset was recorded in accordance with the consensus reached by the Emerging Issues Task Force during their November 2001 meeting with respect to EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other than Employees." The resulting intangible asset will be amortized, subject to periodic evaluations for impairment, over the term of the Corporate Alliance Agreement, 10 years. Additionally, the Company will record the nominal cash contribution to be received. The amortization expense, expected to be $1.4 million per year, will reduce future operating results, with no effect on operating cash flows.

7. Debt Payable

On April 30, 2001, IMPCO amended its credit facility with Bank of America NT&SA to include a $5,000,000 line of credit for the Company. This line of credit was secured by the assets of the Company and was guaranteed by the parent. This revolving line of credit carried an interest rate of prime plus 2.25%. In September 2001, the credit facility with Bank of America was amended to allow the Company to increase its portion of the line of credit from $5.0 million to $15.0 million. As of April 30, 2002, the outstanding balance on this line of credit was approximately $8,625,000 and bore an interest rate of 7%.

On June 24, 2002, IMPCO amended its credit facility with Bank of America NT&SA in which IMPCO released the Company as a borrower under the line of credit.

8. Income taxes

Income taxes in the Company's financial statements have been calculated on a separate tax return basis. The following table presents the principal reasons for the difference between the effective tax rate and the federal statutory income tax rate:

	Year Ended April 30		
	2000	2001	2002
Income tax benefit at U.S. statutory rates	(34.0)%	(34.0)%	(34.0)%
State and local income taxes, net of federal benefit	(5.8)%	(5.9)%	(5.9)%
Net operating losses and research and development credits retained by IMPCO	34.9%	35.1%	35.0%
Other	4.0%	3.6%	4.0%
Valuation allowance	0.9%	1.2%	0.9%
	0.0%	0.0%	0.0%

The following table presents the federal and state and local provision for income taxes on a separate tax return basis:

	April 30		
	2000	2001	2002
Current:			
Federal	$ —	$ —	$ —
State and local	—	—	—
Deferred:			
Federal	80,000	300,000	359,000
State and local	14,000	53,000	63,000
	94,000	353,000	422,000
Less: Change in Valuation Allowance	(94,000)	(353,000)	(422,000)
Subtotal	—	—	—
Income tax benefit	$ —	$ —	$ —

The components of deferred tax assets and liabilities are as follows:

	April 30		
	2000	2001	2002
Deferred income tax assets:			
Accrued compensation	$ 139,000	$ 246,000	$ 144,000
Accrued warranty	85,000	166,000	500,000
Inventory	214,000	457,000	1,041,000
Allowance for doubtful accounts	16,000	16,000	16,000
	454,000	885,000	1,701,000
Less: Valuation Allowance	(321,000)	(674,000)	(1,096,000)
Total deferred income tax assets	133,000	211,000	605,000
Deferred income tax liabilities:			
Equipment and leasehold improvements	(133,000)	(211,000)	(605,000)
Total deferred tax liabilities	(133,000)	(211,000)	(605,000)
Net deferred tax (liabilities) assets	$ —	$ —	$ —

The tax credits and net operating losses incurred through the date of the distribution will remain with IMPCO after the spin-off. The valuation allowance has been established for deferred tax assets due to the lack of earnings history by the Company.

9. Commitments and Contingencies

Leases

The Company has certain non-cancelable operating leases for facilities and equipment, and non-cancelable capital leases for machinery, equipment and motor vehicles. Future minimum lease commitments under non-cancelable leases at April 30, 2002 are as follows:

	Lease Obligations	
	Capital	Operating
2003	$188,844	$1,625,789
2004	141,633	1,623,691
2005	—	1,289,307
2006	—	848,572
2007	—	622,879
Thereafter	—	687,430
Total minimum lease payments	330,477	$6,697,668
Less imputed interest	14,290	
Present value of future minimum lease payments	316,187	
Less current portion	188,832	
Long-term capital lease obligation	$127,355	

Total rental expense under the operating leases for fiscal years ended April 30, 2000, 2001, and 2002 was approximately $656,000, $1,763,000 and $2,442,000, respectively. These leases are non-cancelable and certain leases have renewal options and escalation clauses.

Royalties

The Company has entered into contracts under which it is required to pay royalties for products sold using certain technologies covered by these contracts. No royalty expense was incurred under these contracts for any of the periods reported in the financial statements.

Contingencies

The Company is currently subject to certain legal proceedings and claims arising in the ordinary course of business. Management does not believe that the outcome of any of these matters will have a materially adverse effect on the Company's financial statements.

Investment and Tax Savings Plan

For the period covered under these financial statements, the Company participated in IMPCO's Investment and Tax Savings Plan. The Company intends to create an Investment and Tax Savings Plan similar to the plan offered by IMPCO. IMPCO's Investment and Tax Savings Plan (the Plan) is a defined contribution plan, which is qualified under Internal Revenue Service Code Section 401(k). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974. All employees who are at least age twenty-one or older are eligible to participate in the Plan on the first day of employment with the Company. Employees of the Company who elect to participate in the Plan may contribute into the Plan not less than 1% nor more than 15% of

compensation. The Company's matching contributions are discretionary and match elective salary deferrals up to 3% of compensation. Approximately 72% of eligible employees were enrolled in the IMPCO 401(k) plan at April 30, 2002. Contributions attributable to the Company approximated $201,000, $308,000, and $333,000 for fiscal years ended 2000, 2001 and 2002, respectively.

10. Stockholders' Equity

(a) Authorized Capital Stock

The Company has authority to issue a total of 80,000,000 shares of all classes of stock, of which 20,000,000 may be shares of preferred stock and 60,000,000 may be shares of common stock. Of those shares of common stock, 12,000,000 will be designated as Series A common stock and 6,000,000 will be designated as Series B common stock. On February 11, 2002, the Company issued 1,000 shares of common stock to IMPCO for $100.

(b) Quantum Common Stock

Holders of the Company's common stock will be entitled to one vote for each share on all matters voted on by stockholders. Holders of common stock will not have cumulative voting rights in the election of directors.

Holders of the Company's common stock will not have subscription, redemption or conversion privileges. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of the Company's common stock will be entitled to participate ratably in dividends the Company's common stock as declared by the board of directors. Holders of common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of liquidation or dissolution of the Company, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock. No holder of any capital stock of the Company authorized at the distribution date will have any preemptive right to subscribe for or purchase any securities of any class or kind of the Company.

(c) Series A Common Stock

As part of the GM Strategic alliance, the Company agreed to issue to GM, and GM agreed to acquire, that number of shares of the Company's Series A Common Stock, $0.001 par value per share, which, when combined with all shares of capital stock of the Company then issued and outstanding, shall equal 19.9% of the issued and outstanding shares of the capital stock of the Company. Upon the closing of an initial public offering of the Company's securities to the general public, the outstanding shares of Series A common stock will automatically be converted into an equal number of shares of common stock. Holders of the Company's Series A common stock will have the same voting rights as holders of the Company's common stock.

Prior to an initial public offering of the Company's securities, in the event of the issuance of additional shares of common stock as a dividend or other distribution on the Company's outstanding common stock, or a subdivision or combination of the Company's common stock into a smaller or greater number of shares, the number of shares of Series A common stock will be adjusted to that number of shares of Series A common stock that is equal to the percentage of all outstanding shares of all series of the Company's common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan) that the holders of Series A common stock held prior to such event. In the event the Company effects any other issuance of additional shares of common stock (including any shares issued in an initial public offering of the Company's securities, but excluding shares or options issued pursuant to a board-approved stock option or equity incentive plan), the holders of Series A common stock will receive shares of non-voting Series B common stock in an amount that will cause the issued and outstanding Series A and Series B common stock, taken together, to equal 19.9% of the

issued and outstanding shares of all series of the Company's common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan). Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of Series A common stock will be entitled to participate ratably in dividends on the Company's common stock as declared by the Company's board of directors. Holders of Series A common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of liquidation or dissolution of the Company, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock.

(d) Series B Common Stock

Shares of the Company's Series B common stock will not be entitled to vote on any matters voted on by stockholders except as otherwise specifically required by law. In the event the Company issues additional shares of common stock as a divided or other distribution on the Company's outstanding common stock, or a subdivision or combination of the Company's common stock into a smaller or greater number of shares, the number of shares of Series B common stock will be adjusted to that number of shares of Series B common stock that is equal to the percentage of all outstanding shares of all series of the Company's common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan) that the holders of Series B common stock held prior to such event. Upon the transfer of any of the outstanding shares of Series B common stock to any person or entity that is not controlled by or under common control with General Motors, the transferred shares of Series B common stock will convert into an equal number of shares of the Company's common stock. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of the Company's Series B common stock will be entitled to participate ratably in dividends on the Company's common stock as declared by the Company's board of directors. Holders of the Company's Series B common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of liquidation or dissolution of Quantum, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock.

(e) Preferred Stock

The Company's certificate of incorporation authorizes the board of directors, without any vote or action by the holders of the Company's common stock, to issue up to 20,000,000 shares of preferred stock from time to time in one or more series. The Company's board of directors are authorized to determine the number of shares and designation of any series of preferred stock and the dividend rights, dividend rate, conversion rights and terms, voting rights (full or limited, if any), redemption rights and terms, liquidation preferences and sinking fund terms of any series of preferred stock. Issuances of preferred stock would be subject to the applicable rules of the NASDAQ National Market or other organizations on whose systems the Company's stock may then be quoted or listed. Depending upon the terms of preferred stock established by the Company's board of directors, any or all series of preferred stock could have preference over the Company's common stock with respect to dividends and other distributions and upon liquidation of the Company. Issuance of any such shares with voting powers, or issuance of additional shares of the Company's common stock, would dilute the voting power of the Company's outstanding common stock. The Company has no present plans to issue any preferred stock.

(f) Warrants

In connection with the Contribution and Distribution Agreement with IMPCO, the Company agreed to issue warrants to purchase shares of the Company's common stock to holders of outstanding IMPCO warrants as of the distribution date. Holders of unexercised IMPCO warrants will be entitled to receive a warrant to purchase one share of the Company's common stock for each share of IMPCO common stock covered by such holder's warrant

that was outstanding as of the distribution record date. The exercise prices of the existing IMPCO warrants and the new warrants the Company will issue to IMPCO warrant holders will be calculated in the same manner as the IMPCO options described below. The other terms of the new warrants the Company will issue to IMPCO warrant holders will be substantially the same as the IMPCO warrants to which they relate. Based on the IMPCO warrants outstanding at July 23, 2002, the Company expects to issue warrants to purchase an aggregate of 300,000 shares of the Company's common stock at an exercise price of $5.83 per share.

(g) Stock options

The Company has adopted a Stock Incentive Plan with a maximum number of shares available for grant of options to purchase up to 3,500,000 shares of the Company's common stock. As part of the spin-off from IMPCO, all stock options from IMPCO split into stock options of the Company and IMPCO. The IMPCO options outstanding on the distribution date were split into one option of IMPCO and one option of Quantum stock. The exercise price of both the IMPCO and Quantum stock options was adjusted based on the relative market values of the common stock of both companies on the first trading day following the spin-off. All vesting schedules remain the same and the option holders will not be required to exercise their options concurrently. Accordingly, the adoption of the Company's stock option plan did not give rise to a compensation charge.

IMPCO had six stock option plans that provided for the issuance of options to key employees and directors of the Company at the fair market value at the time of grant. Options under the plans generally vested in four or five years and are generally exercisable while the individual is an employee or a director, or ordinarily within one month following termination of employment. In no event may options be exercised more than ten years after date of grant. The exercise price of the IMPCO options granted equaled the market price of the IMPCO stock on the grant date. Exercise prices shown below reflect the grant of options to purchase the Company's common stock granted in connection with the spin-off at their adjusted prices.

	Number of Shares	Weighted Average Exercise Price
Outstanding at April 30, 1999	1,502,658	$3.70
Options granted	104,974	4.60
Options exercised	(163,326)	3.16
Options forfeited	(122,375)	3.67
Options outstanding at April 30, 2000	1,321,931	$3.84
Options granted	416,453	5.72
Options exercised	(97,572)	3.97
Options forfeited	(46,047)	6.90
Options outstanding at April 30, 2001	1,594,765	$4.23
Options granted	232,000	4.84
Options exercised	(328,459)	3.52
Options forfeited	(120,826)	5.18
Options outstanding at April 30, 2002	1,377,480	$4.35
Shares exercisable at April 30, 2000	685,334	$3.82
Shares exercisable at April 30, 2001	774,889	$3.67
Shares exercisable at April 30, 2002	666,623	$3.77

The following table sets forth summarized information with respect to stock options outstanding and exercisable at April 30, 2002:

Exercise Price Range	Outstanding			Exercisable	
	Number of Shares	Average Life	Average Price	Number of Shares	Average Price
$1.96 to $2.95	93,111	3.2	$2.58	93,111	$2.58
$2.95 to $3.93	486,796	4.9	3.41	385,796	3.42
$3.93 to $4.91	548,416	8.5	4.75	68,005	4.64
$4.91 to $5.89	151,152	4.5	5.24	109,132	5.12
$5.89 to $6.87	69,405	8.9	6.29	579	6.08
$6.87 to $7.86	10,000	0.0	7.15	10,000	7.15
$7.86 to $9.82	18,600	8.3	9.82	—	—
	1,377,480			666,623	

The Company has elected to account for its employee stock options under Accounting Principles Board Opinion 25, "Accounting for Stock Issued to Employees" (APB 25) and related interpretations in accounting for employee stock options. No compensation expense is recorded under APB 25 because the exercise price of the Company's employee common stock options equals the market price of the underlying common stock on the grant date.

SFAS 123 requires "as adjusted" information regarding net income and net income per share to be disclosed for new options granted after fiscal year 1996. The fair value of these options was determined at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended April 30		
	2000	2001	2002
Expected dividend yield	0.0%	0.0%	0.0%
Calculated volatility	0.729	0.683	0.801
Risk-free interest rate	3%	5%	5%
Expected life of the option in years	8.82	7.45	10.00

The estimated fair value of the options is amortized to expense over the options' vesting period for "as adjusted" disclosures. The net income per share "as adjusted" for the effects of SFAS 123 is not indicative of the effects on reported net income/loss for future years. The Company's reported "as adjusted" information at April 30 is as follows (in thousands, except per share amounts):

	Year Ended April 30		
	2000	2001	2002
Net loss	$(10,635)	$(30,244)	$(43,378)
As adjusted	$(10,807)	$(30,547)	$(43,504)
Pro Forma net loss per share as reported—basic and dilutive			(2.46)
Pro Forma net loss per share as adjusted—basic and dilutive			(2.46)

The number of shares used in the calculation of the "as adjusted" per share amounts was 17,655,475.

11. Business Segment and Geographic Information

Business Segments

Although the Company classifies its business operations in one operating segment, the Alternative Fuel business, the Company's chief operating decision maker allocates resources and tracks performance in three areas: the Alternative Fuel business, Research & Development and Corporate Expenses.

All research and development is expensed as incurred. Research and development expense includes both customer-funded research and development and Company sponsored research and development. Customer funded research and development consists primarily of expenses associated with contract revenue. These expenses include applications development costs funded under customer contracts.

The Company evaluates performance based on profit or loss from operations before interest and income taxes. The accounting policies of the reportable segments are the same as those described in the Summary of Significant Accounting Policies.

All of the Company's product revenues are generated from alternative fuel systems for automotive OEM applications. The Company's revenue to unaffiliated customers is derived from within the United States. All of the Company's long-lived assets are based either in its offices in Sterling Heights, Michigan, Irvine, California, and Lake Forest, California.

Financial Information by Business Segment.

Financial information by business segment for continuing operations follows (in thousands):

	Fiscal Year Ended April 30		
Revenues	**2000**	**2001**	**2002**
Alternative fuels	$22,341	$23,358	$23,403
Research and development	—	—	—
Corporate expenses	—	—	—
Total	$22,341	$23,358	$23,403

	Fiscal Year Ended April 30		
Operating Income (Loss)	**2000**	**2001**	**2002**
Alternative fuels	$ 1,475	$ (1,617	$ (8,512)
Research and development	(7,171)	(21,164)	(26,323)
Corporate expenses	(4,939)	(7,459)	(8,063)
Total	$(10,635)	$(30,240)	$(42,898)

The research and development segment of the total operating loss does not include the product application development costs included in cost of contract revenues. In the statements of operations for the fiscal years ended 2000, 2001, and 2002, the cost of contract revenues of $5,786, $5,522, and $6,334, respectively, have been included in research and development costs.

	Fiscal Year Ended April 30		
Identifiable Assets	**2000**	**2001**	**2002**
Alternative fuels	$20,668	$23,266	$19,676
Research and development	849	1,801	3,691
Corporate expenses	1,441	6,452	4,173
Total identifiable assets	22,958	31,519	27,540
Assets not specifically identifiable	441	1,296	619
Total assets	$23,399	$32,815	$28,159

Capital Expenditures	Fiscal Year Ended April 30		
	2000	2001	2002
Alternative fuels	$1,404	$4,336	$ 659
Research and development	352	2,234	1,145
Corporate expenses	135	2,577	1,667
Total	$1,891	$9,147	$3,471

Depreciation and Amortization	Fiscal Year Ended April 30		
	2000	2001	2002
Alternative fuels	$ 659	$ 591	$ 844
Research and development	207	239	751
Corporate expenses	351	857	1,308
Total	$1,217	$1,687	$2,903

12. Revenue

The Company has been engineering, testing and validating CNG systems for certain 1997-2003 model year car and truck platforms in compliance with GM's specifications.

Revenues for development efforts are principally recognized by the percentage of completion method and principally related to contracts with GM. During fiscal year 2000, 2001 and 2002, GM and affiliated companies' revenues comprised 99.1%, 98.7% and 79.9% of the Company's total revenues, respectively. As of April 30, 2001 and 2002, GM and affiliated companies' accounts receivable comprised 95.3% and 81.8% of the Company's total outstanding accounts receivable, respectively.

As of April 30, 2001 and 2002, accounts receivable includes amounts due under long-term contracts in the amounts of approximately $5,004,000 and $2,085,000, respectively. These amounts represent the recognized sales value of performance that had not been billed and were not billable to customers at these dates. The billing terms for all long-term contracts are based on milestone billings or discrete activities. All amounts due under long term contracts are expected to be collected by the end of the following fiscal year.

13. Purchases

During fiscal years 2000, 2001, and 2002, respectively, purchases from one vendor constituted approximately 12%, 7% and 10% of net purchases. In fiscal year 2000, 2001, and 2002, 10 suppliers accounted for approximately 43%, 31% and 46% of net purchases, respectively.

14. Restructuring Charges

Beginning in June 2000, following a successful follow-on offering of common stock by IMPCO, the Company developed a cost structure that included substantial research and development activity, as well as investments in new facilities, to take advantage of its position in the emerging fuel cell industry. In September 2001, in reaction to prevailing market conditions, management enacted a plan to, among other things, significantly reduce the Company's operating costs.

In December 2001, the Company adopted a plan to close its Guaymas, Mexico manufacturing operations, close one of its Sterling Heights, Michigan offices and terminate the employees supporting these facilities.

Accordingly, the Company recorded a charge of approximately $1,162,000 during fiscal year 2002 for headcount reduction, lease and contract exit costs and other asset writedowns. In connection with these actions, the Company initiated involuntary separation plans that included headcount reductions of approximately 62 employees at a cost of $180,000 for severance and related costs. Additional costs of $982,000 were recorded to include losses on asset writedowns, office leases, net of anticipated sublease income over the lease term and contract exit costs.

The major components of the restructuring charges and the remaining accrual balance as of April 30, 2002 are as follows (in thousands):

	Charge	Amounts Used	Accrued Restructuring Costs
Employee termination and severance costs	$ 180	$180	$ —
Lease exit costs	394	116	278
Contract exit costs	114	114	—
Asset writedowns	474	474	—
	$1,162	$884	$ 278

15. Quarterly Results of Operations (unaudited)

A summary of the unaudited quarterly results of operations follows (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal year 2001				
Product sales	$ 4,323	$ 2,171	$ 2,782	$ 6,171
Contract revenue	2,669	2,695	1,116	1,431
Total revenue	6,992	4,866	3,898	7,602
Cost of product sales	4,732	2,858	3,977	7,885
Gross profit (loss) on product sales	(409)	(687)	(1,195)	(1,714)
Research and development expense	4,570	5,660	7,059	9,398
Net loss(A)	(3,641)	(5,107)	(9,224)	(12,272)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal Year 2002				
Product sales	$ 4,591	$ 4,593	$ 2,205	$ 4,069
Contract revenue	2,338	1,247	1,312	3,048
Total revenue	6,929	5,840	3,517	7,117
Cost of product sales	6,590	7,548	4,374	7,069
Gross profit (loss) on product sales	(1,999)	(2,955)	(2,169)	(3,000)
Research and development expense	9,750	9,179	7,353	6,375
Net loss(A)	(11,231)	(13,704)	(10,215)	(8,228)

(A) The Company made certain adjustments in the following quarters of fiscal years 2001 and 2002 resulting from changes in estimates, unusual, or infrequently occurring items and that were material to the results of those quarters.

These adjustments increased net loss as follows (in thousands):

	For the fiscal year 2001
Third quarter adjustment:	
Inventory adjustments due to obsolescence	$ 150
Fourth quarter adjustment:	
Inventory adjustments due to obsolescence	$ 289
First quarter adjustment:	
Increase "lower of cost-or-market" reserve related to the GM pick-up truck application	$ 485
Inventory adjustments due to obsolescence	100
	$ 585
Second quarter adjustment:	
Increase "lower of cost-or-market" reserve related to the GM pick-up truck application	$ 557
Increase in warranty reserves due to change in estimate	154
Increase in non-recurring legal and consulting services	1,344
	$2,055
Third quarter adjustment:	
Inventory adjustments due to obsolescence	269
Increase in warranty reserves due to change in estimate	562
Restructuring charge	647
Increase in non-recurring legal and consulting services	256
	$1,734
Fourth quarter adjustment:	
Inventory adjustments due to obsolescence	367
Increase in warranty reserves due to change in estimate	524
Decrease "lower of cost-or-market" reserve related to the GM pick up truck application	(528)
Restructuring charge	515
Increase in non-recurring legal and consulting services	417
	$1,295

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Year	Additions Charged/ (Credited) to Cost and Expenses	Write-offs and Other Adjustments	Balance at End of Year
Allowance for Doubtful Accounts for the year ended:				
April 30, 2000	$ (40,000)	(209,624)	209,624	(40,000)
April 30, 2001	$ (40,000)	—	—	(40,000)
April 30, 2002	$ (40,000)	(8,172)	8,172	(40,000)
Provision for Obsolescence Reserve for the year ended:				
April 30, 2000	$ (152,981)	(255,315)	26,835	(381,461)
April 30, 2001	$ (381,461)	(675,447)	—	(1,056,909)
April 30, 2002	$(1,056,909)	(2,089,380)	615,348	(2,530,941)
Warranty Reserve for the year ended:				
April 30, 2000	$ (246,831)	(281,827)	315,291	(213,367)
April 30, 2001	$ (213,367)	(426,939)	225,313	(414,993)
April 30, 2002	$ (414,993)	(1,475,052)	664,147	(1,225,898)

UNAUDITED PRO FORMA FINANCIAL DATA

The following unaudited pro forma condensed financial statements have been prepared in accordance with Article 11 of Regulation S-X to illustrate the effect of the distribution. The unaudited pro forma condensed balance sheet illustrates the Company's post distribution balance sheet. The unaudited pro forma condensed statement of operations illustrates the Company's post distribution statement of operations for the year ended April 30, 2002 as if the distribution had occurred on May 1, 2001.

Prior to distribution, IMPCO transferred to the Company the assets and liabilities constituting its automotive OEM business. Based on the pro forma April 30, 2002 balance sheet, these assets and liabilities include assets of $57.2 million, consisting primarily of cash, accounts receivables, inventory and equipment, and liabilities of $9.3 million, consisting primarily of accounts payable.

The following unaudited pro forma condensed financial statements reflect the Company's issuance to IMPCO of 14,141,036 shares of the Company's common stock prior to the distribution; IMPCO's transfer to the Company of assets and $15.0 million in cash and the assumption by IMPCO of $8.6 million of the Company's outstanding debt; the distribution by IMPCO to its stockholders of 14,142,036 shares of the Company's common stock held by IMPCO; the conversion of invested equity into stockholders' equity; and the issuance of 3,513,439 shares of the Company's Series A common stock to General Motors in connection with the Company's strategic alliance with General Motors. The issuance of the Series A common stock to General Motors has been presented at its expected fair market value on the date of the distribution of approximately $14 million and is subject to a final determination of market value. The resulting intangible asset will be amortized, subject to periodic evaluations for impairment, over the term of the Corporate Alliance Agreement, 10 years.

The pro forma adjustments are based upon available information and upon certain assumptions that management believes are reasonable under the circumstances. The unaudited pro forma condensed financial statements should be read in conjunction with the historical financial statements and the notes thereto. The unaudited pro forma condensed financial statements do not purport to represent what the Company's actual results of operations or actual financial position would have been if the spin-off from IMPCO in fact occurred on such dates or to project the Company's results of operations or financial position for any such future period or date.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

UNAUDITED PRO FORMA CONDENSED STATEMENTS OF OPERATIONS
For the Fiscal Year Ended April 30, 2002
(dollars in thousands, except per share amounts)

	Historical	Adjustments	Pro Forma(E)
Net revenue:			
Product sales	$ 15,458		$ 15,458
Contract revenue	7,945		7,945
Total revenue	23,403		23,403
Cost and expenses:			
Cost of product sales	25,581		25,581
Research and development	32,657		32,657
Selling, general and administrative	8,063	1,400(F)	9,463
Operating loss	(42,898)		(44,298)
Interest expense, net	488		488
Other income	9		9
Income tax	1		1
Net loss	$(43,378)		$ (44,778)
Pro forma loss per share (A):			
Basic and diluted			$ (2.54)
Pro forma number of shares used in per share calculation (A):			
Basic and diluted			17,655,475

See accompanying notes to unaudited pro forma condensed financial statements.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

UNAUDITED PRO FORMA CONDENSED BALANCE SHEET
As of April 30, 2002
(dollars in thousands)

	Historical	Adjustments	Pro Forma
ASSETS:			
Cash	$ 177	15,000(B) 4(C)	$15,181
Receivables, less allowances	4,494		4,494
Inventories	9,627		9,627
Other current assets	88		88
Total current assets	$14,386		29,390
Equipment and leasehold improvements, net	13,419		13,419
Intangible asset		14,000(F)	14,000
Other assets	354		354
Total assets	$28,159		$57,163
LIABILITIES:			
Accounts payable and current liabilities	8,948		8,948
Lines of credit	8,625	(8,625)(B)	—
Current maturity of capital leases	189		189
Total current liabilities	17,762		9,137
Long-term debt	127		127
Total liabilities	17,889		9,264
Equity:			
Invested and stockholders' equity	10,270	(10,270)(D)	—
Preferred stock, par value $0.001 per share, 15,000,000 shares authorized (historical), 20,000,000 shares authorized (pro forma), none issued (historical and pro forma)	—		—
Series A common stock, par value $0.001 per share, no shares authorized and issued (historical), 12,000,000 shares authorized (pro forma), 3,513,439 shares issued and outstanding (pro forma)	—	4(C)	4
Series B common stock, par value $0.001 per share, no shares authorized and issued (historical), 6,000,000 shares authorized (pro forma), 0 shares issued and outstanding (pro forma)		—	—
Common stock, par value $0.001 per share, 35,000,000 shares authorized (historical), 0 shares issued and outstanding (historical), 42,000,000 shares authorized (pro forma), 14,142,036 shares issued and outstanding (pro forma)	—	14(D)	14
Additional paid-in capital		23,625(B) 10,256(D) 14,000(F)	47,881
Total equity	10,270		47,899
Total liabilities and equity	$28,159		$57,163

See accompanying notes to unaudited pro forma condensed financial statements.

(A) The computation of pro forma basic and diluted loss per share for the periods presented is based upon 17,655,475 shares of common stock issued and outstanding upon completion of the distribution. The distribution was made on the basis of one share of the Company's common stock for every share of IMPCO common stock. The computation also includes 3,513,439 shares of Series A common stock issued to General Motors as part of the Company's strategic alliance with General Motors. For a description of the issuance of Series A common stock to General Motors, please see "Management's Discussion and Analysis of Financial Condition and Results of Operations—General Motors Relationship." No employee stock options or warrants were included in the computation of pro forma diluted loss per share because their inclusion would be anti-dilutive to the net loss. The following table sets forth the basis for the pro forma loss per share and the pro forma number of shares used in the per share calculation:

	Pro Forma Fiscal Year Ended April 30, 2002
Pro Forma loss per common share—basic and diluted:	
Net loss attributable to common stockholders	$(2.54)
Number of shares (in millions):	
Common shares—basic	17.7
Effect of dilutive stock options:	
Common shares—diluted	17.7
Pro Forma options and warrants excluded from the computation of earnings per share—diluted since inclusion would be anti-dilutive	1.7

(B) Represents a capital investment of $23.6 million the Company received from IMPCO prior to the distribution, consisting of the assumption of $8.6 million outstanding under the Company's debt facility, plus a cash infusion of $15 million. Until 2001, the Company's operations were funded entirely through investments from IMPCO, who for a significant portion of that period funded the Company's operations from IMPCO's own operations or equity proceeds. Management of both companies intended that these advances would be interest-free and would never be repaid. The interest expense reflected in the statement of operations results from the Company's capital lease obligations and, for the fiscal year 2002, debt specifically entered into by the Company. This debt was assumed prior to the distribution, and the Company will finance operations through the Company's working capital and any additional sources of financing as required. The pro forma statements of operations do not reflect any adjustment for interest expense that may be incurred on any future borrowings. Significant amounts of interest expense in future periods could adversely and materially impact the Company's results of operations.

(C) Represents the Series A common stock issued to General Motors as part of the Company's strategic alliance with General Motors. The pro forma adjustment has been made to record the consideration received from General Motors, which consists of a nominal cash contribution and access to certain of General Motors' proprietary information to be provided in connection with the strategic alliance, recorded at General Motors' historical cost basis. For a more detailed description of this equity investment, please see "Management's Discussion and Analysis of Financial Condition and Results of Operations—General Motors Relationship."

(D) On a historical basis, this amount reflects IMPCO's net investment in Quantum, which was recorded as invested equity in the Company's financial statements.

(E) The historical financial statements include allocations of a portion of IMPCO corporate headquarters' assets, liabilities, and expenses relating to the Company's business. General corporate overhead has been

allocated either based on the ratio of the Company's headcount to IMPCO's total consolidated headcount, on the Company's revenue as a percentage of IMPCO's total consolidated revenue, or specifically identified costs for the Company's business. General corporate overhead primarily includes salary and expenses for the executive management, finance, legal, human resources, information services and investor relations departments and amounted to approximately $3,209,000 for the year ended April 30, 2002. Management believes the costs of these services charged to the Company are a reasonable representation of the costs that would have been incurred if the Company had performed these functions as a stand-alone company. As such, no adjustments for these costs have been included in the pro forma condensed statements of operations. Following the contribution to the Company by IMPCO of the assets constituting the Company's business, the Company will perform these functions using the Company's own resources or purchased services. The Company believes that the services purchased from IMPCO under the Transition Services Agreement will be immaterial to the Company's statements of operations.

(F) The issuance of the Series A common stock to General Motors has been presented at its estimated fair market value on the date of the distribution of approximately $14 million, in accordance with Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation," and EITF 96-18, "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services." The intangible asset was recorded in accordance with the consensus reached by the Emerging Issues Task Force during their November 2001 meeting with respect to EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other than Employees." The resulting intangible asset will be amortized, subject to periodic evaluations for impairment, over the ten year term of the Corporate Alliance Agreement. The amortization expense, expected to be $1.4 million per year, is expected to reduce future operating results, with no effect on operating cash flows.

The Company has not allocated any portion of the fair value of the Series A common stock to the Company's prior customer relationship with General Motors. Under our historical arrangement with General Motors, the Company performed research and development activities to design alternative fuel systems for vehicles that operate primarily on natural gas or propane. The Company's historical product sales, which have been primarily to General Motors, have related primarily to these natural gas and propane systems. These activities were performed under arrangements entered into with General Motors over the past several years and were not contemplated by the Company's June 2001 strategic alliance with General Motors. The June 2001 strategic alliance with General Motors provides for the facilitation, interface and optimization of General Motors fuel cell systems with the Company's gaseous fuel storage and handling modules. The Company and General Motors will then license the co-developed fuel cell related technologies to each other for the purpose of developing, manufacturing and selling the fuel cell applications developed under this strategic alliance. Further, the Company and General Motors will work together to advance and commercialize fuel cell systems, which will include efforts on the part of General Motors to introduce and recommend the Company to its customer base for General Motors fuel cell systems as a source for future product sales, and as a recommended partner for the design and supply of gaseous storage and handling systems and sub-systems. Based on the differences between the past and future customer relationship between the Company and General Motors, including the nature of the application development as well as an increased level of support by General Motors under the strategic alliance, the Company does not plan to allocate any portion of the value of the Series A common stock to the Company's previous customer relationship with General Motors.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized on July 29, 2002.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

By: /s/ ALAN P. NIEDZWIECKI
Alan P. Niedzwiecki
President and Chief Operating Officer

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

Name and Signature	Title	Date
/s/ ALAN P. NIEDZWIECKI **Alan P. Niedzwiecki**	President, Chief Operating Officer, Director (Principal Executive Officer)	July 29, 2002
/s/ WILLIAM B. OLSON **William B. Olson***	Chief Financial Officer of IMPCO Technologies, Inc.* (Principal Financial and Accounting Officer)	July 29, 2002
/s/ DALE L. RASMUSSEN **Dale L. Rasmussen**	Chairman of the Board; Director	July 29, 2002
/s/ BRIAN A. RUNKEL **Brian A. Runkel**	Director	July 29, 2002
/s/ SCOTT SAMUELSEN **Scott Samuelsen**	Director	July 29, 2002
/s/ THOMAS J. TYSON **Thomas J. Tyson**	Director	July 29, 2002

* As Chief Financial Officer of IMPCO Technologies, Inc., which was the parent of the Registrant during the period covered by this Report, Mr. Olson performed the functions of Principal Financial and Accounting Officer of the Registrant during the period covered by this Report.

EXHIBIT INDEX

Exhibit Number	Description
2.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (filed as Exhibit 10.1 hereto)
3.1	Amended and Restated Certificate of Incorporation of the Registrant
3.2	Amended and Restated By-laws of the Registrant
4.1	Specimen Common Stock Certificate (previously filed as Exhibit 4.1 to the Registrant's Registration on Form 10 (File No. 0-49629) and incorporated herein by reference)
10.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.2	Tax Allocation and Indemnification Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.3	Transition Services Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.4	Employee Benefit Matters Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.5	Strategic Alliance Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant
10.6	Quantum Fuel Systems Technologies Worldwide, Inc. 2002 Stock Incentive Plan (filed as Exhibit 10.1 to the Registrant's Registration Statement on Form S-8 (No. 333-96923) on July 23, 2002, and incorporated herein by reference)*
10.7†	Corporate Alliance Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.8	Master Technical Development Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.9	Stock Transfer Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.10	Registration Rights Agreement dated June 12, 2001 between the Registrant and General Motors Corporation(1)
10.11	Lease between Klein Investments, Family Limited Partnership, as Lessor, and IMPCO Technologies, Inc. as Lessee, dated August 18, 1997(2)
10.12	Lease dated as of March 31, 2000 by and between IMPCO Technologies, Inc. and Braden Court Associates(3)
10.13	Memorandum of Understanding and Teaming Agreement, dated May 22, 2000 between IMPCO Technologies, Inc. and ATK Thiokol Propulsion (previously filed as Exhibit 10.14 to the Registrant's Registration on Form 10 (File No. 0-49629) and incorporated herein by reference)
10.14	Amendment Nos. 1, 2 and 3 to Memorandum of Understanding and Teaming Agreement, among the Registrant, IMPCO Technologies, Inc. and ATK Thiokol Propulsion
10.15	First Amendment to Corporate Alliance Agreement, dated as of July 19, 2002, between the Registrant and General Motors
10.16	First Amendment to Stock Transfer Agreement, dated as of July 19, 2002, between the Registrant and General Motors

Exhibit Number	Description
10.17	Amendment to Lease Agreement, dated October 18, 2000, among, the Registrant, IMPCO Technologies, Inc. and Braden Court Associates
10.18	Amendment to Lease Agreement, dated October 31, 2000, among the Registrant, IMPCO Technologies, Inc. Klein Investments Family Limited Partnership
21.1	Subsidiaries of the Registrant
23.1	Consent of Ernst & Young LLP, Independent Auditors

† Certain information in this exhibit has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been granted with respect to the omitted portions.

* The referenced exhibit is a compensatory contract, plan or arrangement.

(1) Incorporated by reference to Amendment No. 1 to the Registration Statement on Form S-3 (No. 333-63726) of IMPCO Technologies, Inc., filed with the Commission on July 9, 2001.

(2) Incorporated by reference to the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 1998.

(3) Incorporated by reference to the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 2000.

Corporate Information

Annual Stockholders' Meeting

The annual meeting of stockholders for Quantum Fuel Systems Technologies Worldwide, Inc., will be held November 21, 2002, at 1:30 p.m. at Quantum's Advanced Technology Center, 17872 Cartwright Road, Irvine, CA 92614.

Corporate Counsel

Morrison & Foerster LLP

Independent Auditors

Ernst & Young LLP

Transfer Agent and Registrar

Mellon Investor Services LLP
85 Challenger Road
Ridgefield, NJ 07660
800-522-6645

Corporate Headquarters

17872 Cartwright Road
Irvine, CA 92614
949-399-4500

NASDAQ Symbol: QTWW

Officers & Directors

Alan P. Niedzwiecki

President & Chief Executive Officer

W. Brian Olson

Chief Financial Officer & Treasurer

Cathryn T. Johnston

Corporate Secretary

Raymond W. Corbin

Executive Director, Alternative Fuel Programs

Thomas K. Wiedmann

Vice President, Research & Development

Directors

Dale L. Rasmussen, Chairman

Senior Vice President & Secretary of IMPCO Technologies, Inc.

Brian A. Runkel

Environmental Consultant & Director of the California Environmental Business Council

Scott Samuelsen

Director of the National Fuel Cell Research Center & Professor at the University of California Irvine

Thomas J. Tyson

Consultant & Retired Chief Executive Officer of General Electric's Energy & Environmental Research Corporation