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SONEX RESEARCH INC  
Form 10KSB  
April 15, 2004

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D. C. 20549

FORM 10-KSB

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

For the fiscal year ended December 31, 2003.  
Commission file number 0-14465.

SONEX RESEARCH, INC.

Incorporated in State of Maryland  
23 Hudson Street, Annapolis, Maryland 21401  
Telephone Number: (410) 266-5556  
I.R.S. Employer Identification No. 52-1188993

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

| Title of<br>each class | Name of each exchange on<br>which registered |
|------------------------|--|
| None                   | None   |

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

Common Stock, \$.01 par value

Check whether the Issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months, and (2) has been subject to such filing requirements for the past 90 days. YES NO

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB. [ ]

Revenues for the year ended December 31, 2003 were \$923,813.

The number of shares outstanding of the Issuer's \$.01 par value Common Stock as of March 31, 2004 was 25,032,669. The aggregate market value of voting stock held by non-affiliates of the Registrant was \$2,557,548 as of March 31, 2004.

Documents Incorporated by Reference: None.

PART I

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## ITEM 1. DESCRIPTION OF BUSINESS

### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Sections of this document, as well as all publicly disseminated material about Sonex Research, Inc. ("Sonex" or the "Company"), contain expressions of beliefs, expectations, or intentions, in the form of "forward-looking" statements as that term is defined under applicable federal securities laws. Such statements are based on current expectations, estimates, projections and assumptions by management with respect to, among other things, trends affecting the Company's financial condition or results of operations and the impact of competition. Words such as "expects", "anticipates", "plans", "believes", "estimates", variations of such words, and similar expressions are intended to identify such statements that include, but are not limited to, projections of revenues, earnings, cash flows and contract awards. Such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, all of which are difficult to predict and many of which are beyond the control of the Company.

Forward-looking statements contained herein speak only as of the date of this report. The Company disclaims any obligation to update these statements and cautions readers not to place undue reliance on such statements.

### COMPANY OVERVIEW

Sonex, incorporated in Maryland in 1980, is an engineering research and development firm that is seeking to commercialize its patented proprietary technology (the "Sonex Combustion System", "SCS" or "Ultra Clean Burn™ technology") for in-cylinder control of ignition and combustion in engines of various types. The Company was co-founded in 1980 by Dr. Andrew A. Pouring, a former Professor of Aerospace Engineering and Chairman of the Department of Aerospace Engineering at the U.S. Naval Academy. At Sonex, Dr. Pouring conducted basic research into the principle of in-cylinder control of ignition and combustion, concentrating on the piston. By the late 1980's and early 1990's, the development of the SCS had moved in the direction of chemical/turbulent enhancement of combustion through investigation of the effects of changing the chemical characteristics and fuel disbursement characteristics within the combustion chamber.

The Company seeks to commercialize its SCS technologies for a variety of engine applications for commercial and military use. To date, Sonex has engaged in development and demonstration programs with the engine industry and has received funding from the federal government for further development of the SCS technologies. The Company's primary objective is to execute broad agreements with engine and parts manufacturers for industrial production of SCS components under license from Sonex.

The SCS technology for in-cylinder control of ignition and combustion is designed to

- |X| reduce emissions of diesel engines
- |X| increase fuel mileage of a new generation of gasoline engines
- |X| permit gasoline engines to run on safer, kerosene-based "heavy" fuels

The SCS improves the combustion of fuels in engines through design modification of the pistons in four-stroke, direct injected (DI), engines or the cylinder heads in two-stroke, spark-ignited (SI), gasoline engines to achieve chemical/turbulent enhancement of combustion. The SCS process for both two- and four-stroke engines achieves in-cylinder control of ignition and combustion

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through the chemical/turbulent enhancement of combustion via combustion chamber modifications that change the chemical characteristics and fuel disbursement characteristics within the combustion chamber.

SCS reductions of soot in DI diesel truck engines have been confirmed by an independent international engine consulting firm. Evidence to date indicates that the SCS is a significant new engine design variable, and that the synergy of the SCS in combination with exhaust gas recirculation can help reduce exhaust aftertreatment requirements to meet future regulatory standards. The Company believes that SCS diesel engine designs should provide reductions in the cost and complexity of future exhaust aftertreatment systems.

Sonex also is seeking to show the technical feasibility of achieving reduced fuel consumption while lowering emissions in a new class of DI gasoline engines, yet overcoming the safety concern that vehicles would need to be reduced in size and weight to improve fuel mileage. A new branch of the SCS focusing on the control of ignition may, with further development, enable DI gasoline engined automobiles, currently manufactured and sold only in markets outside the U.S. due to emissions considerations, to become emissions compliant in the U.S. while providing fuel consumption benefits. In addition, the evolution of hybrid gasoline and electric powered vehicles could be accelerated since a major improvement in engine fuel mileage would provide opportunities for tradeoff of vehicle weight versus power.

An SCS process for the conversion of reliable, lightweight, SI, two-stroke, gasoline engines to start and operate on kerosene-based "heavy" fuels has been applied successfully in a variety of applications such as small, remotely controlled military unmanned aerial vehicles (UAVs). The military now requires such engines to operate on less volatile heavy fuels to reduce the hazard associated with gasoline, making heavy fuel engines (HFES) more suitable for applications where gasoline storage and use are undesirable. Potential applications of the SCS heavy fuel conversion process can be expanded to a range of military and commercial uses. Sonex is also developing a process for the heavy fuel conversion of SI four-stroke gasoline engines by using direct injection and patented Sonex designs. In addition, Sonex is examining the potential, through cooperation with one or more companies which have complementary technologies and production capabilities, of becoming a supplier of HFES to military and commercial markets.

As of March 31, 2004, the Company has seven full-time employees and two part-time employees, and engages the part-time services of a consultant who serves as its director of business development and manager of government programs. The Company also engages the services of several other technical and business consultants as needed. The Company has never experienced a strike or work stoppage, and believes its relations with its employees are good.

### STRATEGIC PLANNING

Present Sonex technology development is being supported by U.S. Government funding, and the Company is also seeking committed business partners for further technical development and marketing of the various SCS engine applications. Sonex believes that having one or more such partners experienced in dealing with the engine and automotive industries on state-of-the-art technological developments may accelerate commercial acceptance of the SCS technology. Development efforts taking place currently under government contracts to Sonex could facilitate participation by the engine and automotive industries and thereby accelerate commercialization potential of the patented SCS technology for in-cylinder control of ignition and combustion. In 2003 the Company began

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taking steps to focus on business re-positioning, strengthening its internal capabilities, and planning for growth. The Company engaged consultants to assess the SCS technologies and business model, suggest approaches for strategic alliances, and provide federal marketing, government procurement assistance, and commercialization services.

Management identified a need to secure strong strategic alliances for the marketing and commercialization of the SCS engine applications by leveraging technology development currently supported by U.S. Government funding as well as seeking relationships with companies which have technologies complementary to the SCS. One of the first objectives on this path was to strengthen the Company's management team.

At the start of 2004, the composition of the Company's Board of Directors changed substantially following the resignation in late January and early February 2004 of three independent directors who had served on the Board for several years. Each of these former directors cited other business responsibilities as the reason for his resignation. The only continuing member of the Board is the Company's Chief Executive Officer. The number of members of the Board was reduced from four to three. Named to the Board to serve on an interim basis were the Company's Chief Financial Officer and one independent director.

In late February 2004 the Company's reconstituted Board of Directors hired a new president to fill the position that had been vacant and entered into an employment agreement with this individual. The Company's new president is developing and implementing an updated business plan, the primary goal of which is to transition Sonex from a research and development company into a technology, commercialization, and manufacturing enterprise. There is no assurance, however, that the Company will be able to complete and implement an updated business plan.

### RISK FACTORS

In order to obtain the benefits of the "safe harbor" provisions under applicable federal securities laws for any "forward-looking" statements of the type described previously under the heading "Caution Regarding Forward-Looking Statements", the Company cautions shareholders, investors and prospective investors about significant factors which, among other things, have in some cases affected the Company's actual results and are in the future likely to affect the Company's actual results and cause them to differ materially from those expressed in any such forward-looking statements.

Factors that could cause actual results to differ materially include the specific risks listed below. These risks and uncertainties are not the only ones faced by the Company or that may adversely affect its business. If any of the following risks or uncertainties actually occur, the Company's business, financial condition or results of operations could be materially adversely affected.

- |X| ability to generate cash flow from revenue or to secure financing necessary to fund future operations
- |X| ability to complete technology development and demonstration programs, demonstrate commercial viability of SCS technology and execute licensing agreements that produce significant revenue
- |X| ability to maintain and protect the Company's patents and proprietary information
- |X| ability to attract and retain skilled personnel
- |X| ability to secure a long-term lease for the Company's existing facility or to secure an alternative location
- |X| changes in general economic conditions

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[X] competition from companies which have substantially greater financial, technical and marketing resources than does the Company

Furthermore, since its inception in 1980, the Company has generated cumulative net losses of approximately \$23 million, and anticipates incurring operating losses for the foreseeable future. Operating results have fluctuated significantly in the past on an annual and quarterly basis, and are expected to continue to fluctuate significantly from quarter to quarter for the foreseeable future. The business historically has not generated sufficient cash flow to fund operations without resorting to external sources of capital. The Company does not have any bank financing arrangements. Operating funds have been raised primarily through the sale of equity securities in both public and private offerings, although revenues have provided most of the necessary operating cash for the last two years.

In the event that funding from internal and external sources is insufficient, the Company would have to cut back significantly its level of spending, which could substantially curtail the Company's operations. These reductions could have an adverse effect on the Company's relations with its potential customers and government funding sponsors.

The Company's success also depends in significant part on the continued services of its key technical and senior management personnel. Losing one or more key employees, including for reasons of poor health, disability, or death, could have a material adverse effect on the Company's business, results of operations, and financial condition. Due to the expense involved, the Company does not maintain life insurance policies for any of its employees. Additionally, in order to avoid long-term financial commitments, the Company does not have employment agreements with any of its personnel with the exception of the new president hired in February 2004.

Further, the market price of the Company's Common Stock could be affected adversely by the substantial number of shares that are reserved for, and may be issued in, the future. As of March 31, 2004, there were 25,032,669 shares of Common Stock issued and outstanding, with an additional 12,636,832 shares reserved for future issuance, primarily upon the conversion of preferred stock and the exercise of options and warrants.

### PRIMARY SCS DESIGN MODIFICATIONS

The SCS technology for four-stroke DI engines improves the process of combustion through a combination of chemical and fluid dynamic effects that occur by modifying the engine's combustion chamber and the processes occurring within that chamber. The SCS processes for DI engines change only a single engine component (the piston) while introducing no additional parts and are self-driven by the combustion process. Patented SCS piston designs for four-stroke engines integrate cavities called micro-chambers (MCs) which form a ring around the piston bowl, with each MC positioned with respect to each spray from the fuel injector of a DI engine. The MCs are designed to function either as chemical reactors or reservoirs, depending on the specific design needs, and are connected to the piston bowl by vents. For soot reduction, the reservoirs/vents are placed to increase turbulence, while for enhanced ignition the MCs produce highly active chemical species from a fraction of the fuel-air charge that are expelled on the intake stroke of low compression ratio DI engines to fumigate incoming air and serve as an ignition source.

The SCS processes for DI engines are applicable to: (1) classical diesels as a means to reduce particulate emissions with little or no fuel consumption increase and, if used in conjunction with high levels of exhaust gas recirculation (EGR), to reduce oxides of nitrogen (NOx) and soot with a slight

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fuel consumption increase; and (2) "throttle-less gasoline combustion based on compression ignition and high rates of heat release ("lean burn-fast burn") at normal gasoline engine peak cylinder pressures to improve fuel economy with the potential to reduce emissions to EPA Tier II criteria.

The SCS process for the conversion of lightweight, SI, two-stroke, gasoline engines introduces patented features which enable the combustion of heavy fuels through design modification of the cylinder heads to achieve a thermally and chemically enhanced combustion process while still relying on the spark to initiate combustion. Sonex uses a machined cylinder head and combustion chamber insert housing the proprietary SCS technology, and a heated element fuel vaporizer for cold starting. For engines that have the cylinder head and cylinder in one single casting, the stock cylinder head is removed and the remaining cylinder casting is decked and machined for cylinder head screws. The SCS heavy fuel conversion maintains the gasoline engine's stock carburetion or fuel injection system, intake and exhaust systems, spark ignition system, compression ratio and approximate weight.

### SCS FOR LOW COMPRESSION RATIO DI ENGINES

#### Sonex Controlled Auto Ignition (SCAI)

Sonex is developing a new, enhanced SCS process, focusing on the control of ignition for low compression ratio four-stroke DI engines. This process is an in-cylinder method for isolating a small portion of an un-throttled, lean air-fuel charge in each combustion cycle to produce reactive chemical species that are carried over to cause spark-less compression ignition in the next cycle at gasoline compression ratios.

The combustion chamber modifications for this process make use of certain chemically active products of combustion known as "free radicals" that, in conventional internal combustion engines, are not carried from one combustion cycle to the next. With this SCS process, radical (chemical) species that enable ignition are created by interaction of the injected fuel spray with specially designed MCs in the piston side wall. In its early stages of development, Sonex termed this process Stratified Charge, Radical Ignition (SCRI), as free radicals are isolated in MCs to be carried from one combustion cycle to the next to take advantage of the combustion enhancing properties of the free radicals, thereby enabling ignition of all types of fuels and allowing more complete combustion of the fuel. Sonex has now labeled this enhanced combustion process Sonex Controlled Auto Ignition (SCAI) in order to highlight the special ability of the process to control ignition.

SCAI is an unthrottled, low compression ratio, sparkless, compression ignition process at gasoline compression ratios. The SCAI relies on direct injection of fuel into the cylinder (rather than in the intake manifold) as well as the production of radicals for ignition. SCS micro-chambers for SCAI place a special design emphasis on the chemical aspect allowing controlled auto ignition of any fuel at low compression ratios. The SCAI process for four-stroke engines achieves compression ignition-combustion of the fuel without raising the compression ratio to the levels found in diesel engines. The net result is an engine that is fully controllable at all loads and speeds without limitation, has extremely low emissions and the fuel economy of a diesel engine. As a result, the inherent light weight of the gasoline engine is preserved and peak combustion pressures are limited to those of gasoline operation.

The SCAI process for low compression ratio DI engines was developed in a single-cylinder research engine in the fully equipped Sonex laboratory. The SCAI combustion process for control of ignition and combustion was researched

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initially on diesel-type fuel, and its ability to reduce NOx, the hardest emissions for diesel engine makers to control, was confirmed. Sonex demonstrated this ignition control in a laboratory, single cylinder engine in meeting a U.S. Department of Defense (DoD) objective to convert gasoline engines to kerosene-based, diesel-type "heavy fuels" (JP-5/JP-8), while retaining the performance and lightweight advantages of a gasoline engine. The laboratory engine was adapted to run on diesel-type heavy fuel based on the SCS piston embodiments, DI, sparkless ignition and low compression ratio controlled combustion over a wide range of speed and load. The SCAI process reduced soot/particulates and NOx emissions substantially while maintaining fuel consumption when compared to the stock configuration of the diesel engine.

During 2001 a major international truck engine manufacturer conducted the first phase of a feasibility study of SCAI combustion technology aimed at transferring the Sonex single cylinder laboratory engine to a modern, advanced, four cylinder, medium-duty truck diesel engine that employs all of the latest diesel engine technology such as a high pressure, electronically controlled injection system, and turbo-charging. This program ended due to operational difficulties and reductions in R&D funding without attaining the performance achieved by Sonex in the single-cylinder engine. The manufacturer did find that the SCAI process resulted in certain positive effects on combustion; however, it concluded that the concept was not close enough to production and would require major funding for further research. The study also identified some of the problems to be solved in transferring the SCAI results to a multi-cylinder engine.

In recognition of the economic realities of the highly competitive, cost-conscious engine industry and its own limited financial resources, the Company sought funding from government sources to help achieve a maturation of the SCAI relative to the expectations of engine manufacturers. Sonex is applying the experience gained from this discontinued program with the truck engine manufacturer to work on a \$744,246 Phase 1 contract from the Defense Advanced Research Projects Agency (DARPA) received by the Company in October 2002. The objective of Phase 1 of the DARPA program is to begin the design and development of a heavy fuel engine (HFE) conversion process for a gasoline automotive engine for potential use in a developmental Unmanned Aerial Vehicle (UAV) or other applications. The DoD and NATO now require the elimination of gasoline such that the primary fuel for combat support equipment shall be a single kerosene-based heavy fuel. Heavy fuels are less volatile than gasoline, thereby reducing the hazard associated with the storage, transportation and use of gasoline. Gasoline engines, however, are typically 25% to 30% lighter than diesel engines and, thus, adaptation of gasoline engine designs to burn low cetane (hard to ignite, diesel type) fuel addresses DoD logistics and safety issues.

The first phase of the contract program with DARPA focuses on the SCS SCAI process to convert a modern, spark-ignited (SI), four-stroke, six-cylinder, automotive gasoline engine to heavy fuel operation. The primary objective is to transfer the SCAI heavy fuel design achieved in the Sonex single-cylinder laboratory engine to the multi-cylinder gasoline engine, eliminate the spark ignition system, and produce the same power the engine originally produced on gasoline. Conversion of the engine, originally designed for spark ignition, from gasoline to JP-5 has the advantage of the light weight compared to an ordinary diesel engine since the engine may be used in a UAV application.

During 2003 Sonex adapted the automotive engine using a computer aided design and prototyping fabrication process that involved subcontractors and specialty suppliers, as well as assistance from the engine manufacturer. The SCS throttle-less HFE features a proprietary SCAI piston design, electronically controlled common rail fuel injection system and extensive instrumentation. The first phase recently has demonstrated equal or greater power in a limited range at reduced fuel consumption. It is anticipated that the SCS HFE Phase 1 design, which is already 20% more fuel efficient than the original gasoline engine, can

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be turbo-charged to higher power output with advantageous rates of fuel consumption across a wide range of performance criteria. Sonex is seeking Phase 2 funding from DARPA to continue this program.

Outcomes from the DARPA program could validate the SCAI technology for in-cylinder control of ignition and combustion that could be applied later to a gasoline powered version. The duration of demonstration projects with automotive manufacturers could be reduced since the sparkless SCAI process can advantageously employ the centrally located spark plug hole of most production 4-valve per cylinder engines for the installation of the injector.

In addition, the Company believes the availability of the resultant multi-cylinder, four-stroke heavy fuel engine from a successful outcome of the DARPA project could lead to use in other military engine programs, as well as having potential for use in the commercial marine market in pleasure boats for which a diesel fueled engine would be a safer alternative to the current gasoline engines which too often result in dangerous onboard fires.

### SCAI and HCCI Combustion

Sonex believes that SCAI will enable practical application of an alternative combustion process known as homogeneous charge compression ignition (HCCI) that is being examined by the worldwide automotive industry. HCCI has been studied by many researchers for years because, in theory, it can lower emissions while also achieving reduced fuel consumption. The lack of a method for controlling the ignition point, however, has prevented practical implementation of HCCI. With its SCAI process, Sonex believes it has attained the control of ignition that will make HCCI viable for military and commercial application. A Sonex technical paper supporting the theoretical aspects of SCAI was presented by a consultant to the Company, Dr. David A. Blank, in May 2003 at a joint U.S. and Japan Society of Automotive Engineers (SAE) Fuels and Lubricants meeting in Japan. A second joint paper will be presented at the 2004 SAE Fuels and Lubricants meeting in France by Sonex Chief Executive Officer and Chief Scientist Dr. Andrew A. Pouring in June 2004.

On the basis of the extensive SCAI single cylinder laboratory engine work it has performed with alcohol and heavier fuels, as well as the promising results achieved on the SCS six-cylinder HFE conversion under the DARPA program, Sonex believes it has attained the control of ignition that will make HCCI viable for commercial application in a new generation of gasoline engines. With the SCAI combustion process, radical (chemical) species that enable compression ignition are created by interaction of the injected fuel spray with specially designed micro-chambers in the piston side wall. The net result is an engine that is fully controllable at all loads and speeds without limitation, has extremely low NOx emissions, and the fuel economy of a diesel engine.

SCAI combines the best aspects of HCCI without its inherent limitations. Combustion pressure is kept low so lightweight gasoline engine construction can be used. The spark plug is eliminated so diesel-like radical ignition is used; its timing is fully controllable by the use of diesel-type direct injection into the cylinder.

### SCAI and Gasoline Combustion

Spark ignited (SI), direct injected gasoline (GDI) engines used in five-passenger automobiles manufactured and sold in Japan and Europe achieve 50 mpg (highway) but cannot be sold in the U.S. due to high NOx emissions, which require low sulfur gasoline to assure NOx decomposition in an exhaust treatment system that would be poisoned with high sulfur gasoline sold in the U.S. Low sulfur gasoline will begin introduction in the U.S. in 2006. GDI engines operate



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on high air-fuel ratios. Direct injection uses unrestricted air flow and a fuel injector in each cylinder of the engine to provide precisely timed, metered fuel delivery to the combustion chamber to overcome the air and fuel flow inefficiencies of present gasoline engines. Significantly, all the GDI engines reported to date are complex, use a spark plug to initiate conventional (non-homogeneous) combustion, require premium fuel, and do not meet U.S. emissions standards for NOx regardless of the catalytic converter technology.

All automobile manufacturers are familiar with the potential benefits of the GDI engine in performance, fuel consumption and cost-to-manufacture, as well as the challenging exhaust problem with NOx emissions. Engine researchers know the key to solving the GDI NOx problem is to replace SI, lean combustion with HCCI and controlled, high rate heat release combustion. The vexing challenge has been to achieve a combustion control mechanism that works effectively over the range of engine operation expected of an automotive application. Ignition control is the feature lacking in conventional HCCI combustion but which gives remarkably low emissions and good fuel economy.

Sonex believes that with further development using gasoline, SCS SCAI sparkless ignition, unthrottled process for control of ignition will enable practical application of HCCI in GDI engined automobiles and improve on the current fuel economy advantages and overcome the NOx problem to permit the sale of such vehicles in the U.S. With its SCAI in-cylinder combustion process, Sonex expects to be able to achieve better performance, increased fuel mileage, and reduced NOx.

Fuel economy of vehicles sold in the U.S. is a matter of public law under the CAFE (Corporate Average Fuel Economy) legislation. For the past decade, the U.S. automobile industry has been successful in postponing any legislative actions that would have led to an increase in CAFE. The fuel economy issue, potential increases in the fuel economy standards, and increased dependence on imported oil are major parts of national legislative and political debate. Opponents of proposals for higher fuel economy standards, including automakers, object on the basis that higher fuel mileage can only be achieved by building smaller, lighter - and therefore, presumably less safe - vehicles. Supporters of higher fuel economy standards, however, argue that by using technology currently available to automakers, the improvements can be accomplished without making vehicles smaller.

Sonex believes that, with further development, its SCAI, low compression ratio, combustion process for unthrottled operation can lead to conventional gasoline engined vehicles that are 25% - 30% more fuel efficient than today's vehicles while still meeting U.S. emissions standards. Sonex also believes the SCAI technology has the potential to achieve these benefits and overcome the safety concern that vehicles would need to be reduced in size and weight to improve fuel mileage.

Sonex has provided input to the Department of Energy, the White House, and House and Senate conferees on the synergy between a technologically feasible increase in fuel mileage through the paradigm-shifting SCAI combustion process and improved safety. The Company expects to provide additional input to the legislative process in 2004.

The Company hopes to progressively mature the SCAI process to conclusively demonstrate that it enables fully-responsive GDI engines of all sizes as a viable, near-term alternative to longer-term solutions such as improvements in hybrid propulsion or years of further R&D required for fuel cell technology to become practical. Outcomes from the current Sonex six-cylinder engine program on heavy fuel funded by DARPA should validate the SCAI technology for in-cylinder control of ignition and combustion that could be applied later to a gasoline powered version. Preliminary experimental work at Sonex on gasoline has demonstrated that the SCAI process does achieve the desired control of ignition

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and high rate of heat releases which are necessary to achieve improved fuel consumption and lower emissions.

### SCS FOR DI DIESEL ENGINES

The SCS "Low Soot Diesel Design" (LSDD), based on the Sonex U.S. patents issued in January 1999 and January 2001, is a recent invention in the series for the SCS for "classical" DI diesel engines and involves re-arrangement of SCS features to exploit new fundamental understandings of fluid dynamics. The SCS LSDD has shown significant reductions in soot and NOx while maintaining fuel consumption and power. The key feature of the SCS DI diesel technology is the presence of improved MCs in the piston which to some extent produce and conserve intermediate chemical species from a small portion of the incoming fuel. The expulsion of these materials at high velocity enhances turbulence mixing, achieving better than a 50% soot reduction and a 10% NOx reduction in the Sonex single cylinder, DI, normally aspirated laboratory engine with no change in injection timing. Sonex has also demonstrated that the SCS LSDD can be transferred to a modern turbocharged, intercooled DI diesel engine, as described below.

Application of the LSDD for achieving reduced diesel emissions is highly leveraged when used with exhaust gas recirculation (EGR), allowing enhanced ignition with low soot production in the presence of large amounts of EGR. In the Sonex single cylinder research engine, as well as in a multi-cylinder, normally aspirated diesel engine in the facility of a foreign diesel engine manufacturer, the synergy of SCS and EGR (at levels up to 45%) produced greater NOx reduction than the same engine without EGR over a range of loads and speeds while maintaining the same soot level. Typically, without the SCS, a high level of NOx-reducing EGR produces at least a three-fold increase in soot.

One of the world's leading engine engineering and powertrain consulting firms, Ricardo Consulting Engineers Ltd of the U.K., completed a study in which they reported that a six cylinder DI diesel engine used in medium-duty trucks, operating with the SCS LSDD piston at the best injection timings, emitted up to 45% less soot than the stock engine, with equivalent fuel consumption. The Ricardo program was conducted with the cooperation of a major foreign diesel truck engine manufacturer; however, this manufacturer has not proceeded with further development with Sonex. Ricardo presented its findings, as well as additional results from their subsequent Computational Fluid Dynamics study of the combustion process, in a technical paper to the SAE May 2002 Fuels and Lubes Conference. Sonex is seeking industrial partners to pursue joint marketing and commercialization programs for the SCS LSDD technology.

Sonex has participated in demonstration and development programs with some of the largest multi-national diesel truck engine manufacturers. The demonstration process has gone from proof of concept using screw-assembled prototype pistons fabricated in-house by Sonex and tested by an engine manufacturer in its laboratories, to working with piston suppliers for the fabrication of finished pre-production pistons that would be used in field trials, durability testing, manufacturing optimization, and other tests required before the start of full series production.

Pre-production SCS pistons for the tests were fabricated by Federal-Mogul Corp., a major international supplier of engine components. In 1998 Federal-Mogul acquired the former T&N Piston Products Group of the U.K. T&N had invested significant funds internally in developing innovative and economical techniques of manufacturing Sonex pistons for series production. Federal-Mogul, however, filed for bankruptcy protection in the fall of 2001 to protect its ongoing component supply business from asbestos liabilities left from the acquisition of T&N. Late in 2001 Federal-Mogul informed the Company that it is focusing its limited resources on core businesses and will no longer participate in SCS

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research.

The pre-production SCS pistons for the Ricardo test program fabricated by Federal-Mogul, as well as those for an earlier SCS design fabricated by another piston manufacturer, required special metals processing methods. For that reason, SCS piston production under these methods might have resulted in a higher than expected cost premium for SCS pistons. As a result, Sonex, in conjunction with a consultant who is a former design engineer with a major piston manufacturer, have developed a much simpler SCS piston production method which can be used with existing series production machinery.

Sonex and Compact Membrane Systems, Inc. (CMS), a small business in Wilmington, Delaware, proposed to investigate the diesel engine emissions reduction potential of combining the patented SCS piston-based technology and the CMS polymer membrane technology for the addition of nitrogen enriched air (NEA) to the diesel engine combustion process as an alternative to the use of EGR as a means to reduce the in-cylinder production of NOx. If successful, the CMS method could provide the benefits of EGR with reduced risk to engine wear, with reduced heat load for cooling (EGR), without the burden of additional hardware and without significant impact on the turbo-charger. In the past, the introduction of high levels of EGR to reduce NOx emissions has been shown to substantially increase the production of soot/particulate emissions. SCS piston designs, however, have shown the ability to reduce diesel engine soot/particulate emissions when the engine operates with high levels of EGR.

In 2001 the U.S. Department of Energy (DOE) awarded CMS a Small Business Innovation Research (SBIR) Program, Phase I prime contract to determine the feasibility of combining SCS piston technology with the CMS polymer membrane technology, and a subcontract was issued to Sonex. Phase I testing conducted on the Sonex laboratory, single-cylinder, normally aspirated, DI diesel engine showed that the NEA polymer membrane and the SCS piston in the single-cylinder engine, supercharged by Sonex, have the potential for significant reduction of NOx without increasing soot/particulate emissions.

In the fourth quarter of 2002 the Company received a subcontract from CMS for \$458,862, of which \$100,000 is cost-shared (funded) by Sonex, under a CMS prime contract for a DOE, SBIR Program Phase II project. In the second quarter of 2003 Sonex took delivery of the advanced research automotive diesel engine to be used for the testing. The engine is a state-of-the-art, three-cylinder, DI common rail injection system, turbo-charged, automotive diesel engine developed by a major international vehicle manufacturer in the joint U.S. government and automotive industry funded PNGV (Partnership for a New Generation Vehicle) program. The estimated value of the contribution by the vehicle manufacturer of the automotive diesel engine and associated technical support represents the Sonex cost-shared portion of the subcontract. A successful result of this program would provide SCS in-cylinder emissions reduction data on a multi-cylinder diesel engine as a means for diesel engine manufacturers to evaluate the potential for SCS designs, alone and in combination with the NEA membrane, to reduce the cost and complexity of future exhaust aftertreatment systems.

During engine testing, the Company has not been able to achieve the LSDD performance achieved in other engines with conventional injection systems. Sonex encountered difficulty in controlling the characteristics of the common rail injection system and matching its requirements with the design requirements of the SCS pistons, which must be compatible with the fuel injection system and computer control. Achieving this synergy has been very challenging since many critical parameters of the engine baseline and fuel injection design were not made available to Sonex. In addition, initial testing with the NEA membrane demonstrated the limited viability for commercialization of the CMS membranes in this automotive size application.

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Sonex has developed a plan to understand the difference between the common rail system and earlier injection systems when used with SCS pistons; however, during the first quarter of 2004, CMS suspended further work on the program pending the outcome of a progress meeting to be held with the DOE program sponsor in April 2004. CMS and Sonex have discussed the potential for applying the SCS piston technology and the NEA membrane technology to larger diesel engines in which the NEA membranes are expected to perform better and more consistently.

### SCS FOR SMALL HEAVY FUEL ENGINES (HFES)

The U.S. Department of Defense (DoD) and NATO now require the elimination of gasoline such that the primary fuel for combat support equipment shall be a single kerosene-based, diesel-type, "heavy fuel" (JP-5/JP-8). Heavy fuels are less volatile than gasoline, thereby reducing the hazard associated with the use, storage and transportation of gasoline. The requirement for a single military fuel is also a logistics issue, as the military seeks to minimize the number and complexity of fuels required. Large combat support equipment acquired by the military is powered by diesel engines that can use heavy fuels. No solution has been identified, however, for the thousands of smaller engines, including those powering remotely controlled military unmanned aerial vehicles (UAVs), small boats, and other applications for which gasoline storage, transport and use are undesirable.

### SCS for Small, Two-Stroke Engines

The Company, in its laboratory and under contract with the U.S. military and defense contractors, has applied its proprietary patented SCS starting system and modified combustion chamber to the conversion of reliable, lightweight, spark-ignited (SI), two-stroke, gasoline engines to start and operate on JP-5/JP-8 military heavy fuels for a variety of applications such as small UAVs. Other potential applications include outboard engines, generator sets, and pleasure boats for which a lightweight engine burning heavy fuel would eliminate the hazards of gasoline storage and use.

The SCS process for the conversion of lightweight, SI, two-stroke, gasoline engines incorporates a machined cylinder head and combustion chamber insert housing the proprietary SCS technology. The SCS heavy fuel conversion maintains the gasoline engine's stock carburetion or fuel injection system, intake and exhaust systems, spark ignition system, compression ratio and approximate weight.

The Sonex HFE technology can be applied as a retrofit to existing engines or during manufacture of new engines. Sonex HFES have demonstrated the ability to provide gasoline-like performance over the full engine range without smoking or "knocking", which has been a major shortcoming of other heavy fuel conversion technologies. The SCS heavy fuel conversion maintains the power, fuel consumption, light weight, low cost, and practicality of the gasoline engine without the additional weight and expense of other powerplant alternatives being considered to meet the requirement for heavy fuel operation, such as diesel and turbine engines.

### SCS HFES for the Military

Sonex has successfully scaled its SCS design from an original cylinder displacement of 18 cubic centimeters (cc) to an engine with a 176 cc displacement per cylinder, and is confident that its proprietary SCS technology is scaleable to cylinder volumes larger than 176cc. In 1998 under a "best efforts" feasibility demonstration contract from the U.S. Marine Corps (USMC) Systems Command, Sonex successfully converted the existing SI, carburetted,

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100cc single cylinder, two-stroke, gasoline fueled engines to start and run on heavy fuel, leading the USMC to contract Sonex to convert an additional forty UAV engines used in the DragonDrone UAV. The DragonDrone became the first tactical UAV to be certified for deployment aboard ship. Other potential military HFE applications include outboard engines, small watercraft used as targets, and generator sets.

The Company seeks to capitalize on the success to date with SCS HFEs by participation in new DoD programs. In addition, Sonex seeks sponsors within the DoD who are obliged to make an effort to comply with the directive on the elimination of gasoline when purchasing numerous commercially available items that are powered by two-stroke gasoline engines. In recent years the Company also has been developing relationships with domestic and foreign defense contractors.

In the third quarter of 2002 the Company was awarded a subcontract from Science Applications International Corporation (SAIC) of San Diego, the DoD prime contractor for a developmental UAV, to conduct a survey of commercially available gasoline engines of approximately 72 horsepower and, with the approval of SAIC, select a candidate engine for a "best efforts" SCS conversion to start and operate on heavy fuels. Initial funding of \$200,000 to Sonex was approved to begin the project. SAIC also awarded a subcontract to a competing company to develop a heavy fuel conversion for a rotary engine already in production.

During the candidate engine survey and selection process, the DoD program sponsor increased the targeted horsepower requirement to 100. Sonex and SAIC together selected a candidate two-stroke, three-cylinder, fuel injected gasoline engine which displaces 939 cc (313 cc/cylinder) advertised to meet the new target horsepower requirement, although this engine was not yet in production. Sonex conducted testing of the selected engine on gasoline to develop baseline performance data. In the meantime, additional funding of \$81,947 for Sonex was approved.

Due to deficiencies found by Sonex in operating the candidate engine on gasoline and concurrent fuel consumption problems experienced by the competing rotary engine operating on heavy fuel, in the first quarter of 2003 the DoD sponsor expressed a desire to have Sonex work with the competing rotary engine developer to focus on improving the fuel consumption of the rotary HFE. This joint effort was not formalized because work on the engine later was placed on hold while SAIC concentrated on resolving a number of technical issues with the flight vehicle. Subsequently, the prime contract to SAIC was terminated by the DoD in October 2003. Sonex now seeks to obtain the necessary funding from DoD to continue development of this HFE, and others, for use in intermediate size UAVs for varied missions.

In September 2003 the Company received a purchase order of approximately \$165,000 from another large DoD prime contractor to develop a combustion system to convert two, twin-cylinder, gasoline engines displacing 50cc and 120cc per cylinder, respectively, to start and operate on heavy fuels for potential use in UAVs. To date Sonex has achieved substantial fuel economy benefits on JP-5 fuel on the SCS HFEs over the stock gasoline engines. Delivery of the HFEs to the customer is expected to take place during the second quarter of 2004.

### SCS Potential for Heavy Fuel Rotary Engines

While rotary technology has been the subject of some work worldwide, it is becoming an activity of focus and interest for Sonex. The Company has developed a patent application using proprietary techniques to improve the performance of rotary engines when converted to run on heavy fuels. This is accomplished by implementation of a unique and innovative Sonex process for fuel injection and handling, combined with a modification to the rotary engine fuel system and

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combustion process, thus resulting in two very important attributes for engine performance.

The advantages for the rotary engine when compared to piston technologies as in two-stroke engines are clearly significant. The rotary engine has fewer moving parts and is a very simple and elegant technical solution for UAV engines. Rotary engines converted by Sonex to run on heavy fuel are expected to exhibit efficient and steady performance. Combustion efficiency is expected to improve, thereby decreasing fuel consumption over all load ranges, which is very important for increasing endurance and/or increasing available payload capacity on UAVs.

The Company is exploring a relationship with another small company which is developing rotary engines for use in generator sets for military and commercial use, and has applied for funding from the DoD to begin development work on a small rotary HFE.

### PATENTS AND PROPRIETARY INFORMATION

The Company has endeavored to protect its technology by filing for patents in the U.S. and in those foreign countries in which it may be able to commercialize the SCS. The most recent U.S. patents for the SCS DI diesel engine technology were issued in January 1999 and January 2001, and the most recent U.S. patent for the SCS heavy fuel engine technology was issued in January 1999. The name "SONEX" was registered at the U.S. Patent and Trademark Office in 1987.

The Company has also developed a significant body of trade secrets, proprietary information and know-how relating to its technology. Although the principles underlying the SCS concept are capable of being understood by experts in the field, management believes that it would be difficult to apply the SCS successfully to any given engine configuration without the benefit of the trade secrets, know-how and proprietary information owned by the Company.

Management believes that the Company's business depends substantially upon the protection afforded by its granted and pending patents, as well as its trade secrets, proprietary information and know-how. All contracts outside the Company involving any exchange of confidential technical information are made under secrecy agreements approved by the Company's patent counsel. In addition, all of the management and technical employees of the Company are required to sign non-disclosure agreements respecting the Company's technology.

### COMPETITION

The Company faces significant competition from the extensive research departments of the world's major vehicle and engine manufacturers. These companies exercise a bias toward in-house technologies over those developed by independent suppliers. Competition also comes from several independent engine testing and consulting firms around the world which are in the business of developing engine technologies. The Company's competitors have substantially greater financial, technical and marketing resources than does the Company. Accordingly, the Company cannot be sure that it will have the resources or expertise to compete successfully in the future.

Although the experience and financial resources of its competitors far exceed those of the Company, management believes that the SCS can provide significant advantages over the competition in terms of low cost, improved performance, and simplicity.

### SECURITY AND NON-DISCLOSURE

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Due to the highly competitive nature of the engine industry, in connection with its contracts and/or demonstration programs with manufacturers, Sonex is required to execute joint secrecy and disclosure agreements that, in most cases, expressly prohibit the public disclosure of the names and other significant information about the participants and the current or proposed programs. Failure by Sonex to maintain this strict level of confidentiality would jeopardize its relationship with these organizations.

### ITEM 2. DESCRIPTION OF PROPERTY

The Company's principal executive offices and testing facility are housed in a single story building located at 23 Hudson Street, Annapolis, Maryland, 21401. The facility is equipped with emissions and engine testing equipment and machine shop and storage facilities necessary to support the laboratory. Management believes that this facility is adequate and suitable for the Company's present needs, and that all of the Company's property is adequately covered by insurance. The building contains approximately 6,000 square feet and is being occupied by the Company on a month-to-month basis under the terms of an operating lease agreement, pursuant to which the property owner is required to provide thirty days notice if he wants the Company to vacate the premises. Management will seek to negotiate a new long-term lease for its facility or search for an alternative location in the event that an agreement cannot be reached for the existing premises. Management believes that the resolution of the uncertainty with respect to the facility will not result in a significant interruption in the operations of the Company.

### ITEM 3. LEGAL PROCEEDINGS

As of the date of this report, management is aware of no legal proceedings pending against the Company.

### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fourth quarter of 2003.

## PART II

### ITEM 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

#### PUBLIC TRADING OF COMMON STOCK

The Company's Common Stock currently is traded in the over-the-counter market on the OTC Bulletin Board service under the symbol "SONX". The OTC Bulletin Board is an electronic and screen-based quotation medium operated by NASDAQ. Quotation information on OTC Bulletin Board stocks is available on stockbrokers' desktop terminals.

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The high and low closing prices of the Common Stock, obtained from the historical pricing information available on the NASDAQ website [www.nasdaq.com](http://www.nasdaq.com), for each quarterly period since January 1, 2002 were as follows:

| Quarter ended:     | High  | Low   |
|--------------------|-------|-------|
| March 31, 2002     | \$.23 | \$.14 |
| June 30, 2002      | .16   | .06   |
| September 30, 2002 | .30   | .06   |
| December 31, 2002  | .26   | .14   |
| March 31, 2003     | .24   | .15   |
| June 30, 2003      | .22   | .14   |
| September 30, 2003 | .20   | .11   |
| December 31, 2003  | .20   | .10   |
| March 31, 2004     | .16   | .09   |

### SHARES OUTSTANDING AND RESERVED FOR ISSUANCE; HOLDERS; DIVIDENDS

As of March 31, 2004, there were 25,032,669 shares of Common Stock issued and outstanding, with approximately 900 holders of record. The shares for approximately 1,800 additional beneficial owners of the Common Stock are held of record (in "street name") by brokers, dealers, banks, and other entities holding such securities of record in nominee name or otherwise or as a participant in a clearing agency registered pursuant to Section 17A of the Securities Exchange Act of 1934.

As of March 31, 2004, a total of 12,636,832 shares of Common Stock were reserved for future issuance as follows: 4,400,000 shares issuable upon the conversion of preferred stock outstanding; 4,733,907 shares issuable upon the exercise of options granted under the Company's Stock Option Plan (the "Option Plan"); 1,330,425 shares for options available to be granted under the Option Plan; 500,000 shares issuable upon the exercise of options granted to the Company's new president which are not part of the Option Plan; 200,000 shares issuable on March 15, 2005 to the Company's new president upon continued employment; 992,500 shares issuable upon the exercise of outstanding warrants; 420,000 shares issuable in connection with a consulting agreement; and 60,000 shares issuable upon the conversion of notes payable outstanding.

Presently the only securities authorized for issuance under equity compensation plans relate to the Option Plan and the option granted to the Company's new president which is not part of the Option Plan, which grant was made on February 23, 2004. Detailed information as of December 31, 2003 with respect to Common Stock issuable under the Option Plan, including activity during 2003 and weighted average exercise prices, is presented in tabular form in Note 14 to the accompanying financial statements.

The Company has never paid cash dividends on its Common Stock and does not expect to pay any cash dividends in the foreseeable future.

### RECENT SALES OF UNREGISTERED SECURITIES

During 2003 the Company issued no securities without registration under the Securities Act of 1933 (the "Securities Act"). In the first quarter of 2004 the Company issued without registration under the Securities Act an aggregate of 3,440,000 shares of Common Stock in connection with the execution of various agreements for services, officer, director and employee compensation, and the satisfaction of liabilities for accrued compensation, as more fully described in



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Note 17 to the accompanying financial statements. The Company views these issuances as transactions by an issuer not involving any public offering and therefore as exempt from registration under Sections 4(2) and/or 4(6) of the Securities Act.

The certificates representing such shares are endorsed with a standard restrictive legend stating that the shares have not been registered under the Securities Act or in any state or other jurisdiction, and that no disposition of the shares may be made unless pursuant to an effective registration statement or upon the issuance of an opinion of the Company's legal counsel that the disposition may be made pursuant to a valid exemption from any registration requirements.

### ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Note: Statements made in the following discussion which express beliefs, expectations, or intentions, as well as those that are not historical fact, are "forward-looking" statements that are subject to risks, uncertainties and assumptions. Our actual results, performance or achievements could differ materially from those expressed in any such forward-looking statements as a result of a variety of factors, including the risks and uncertainties referred to under the "Caution Regarding Forward-Looking Statements" and "Risk Factors" sections in Item 1 of this report.

#### ACCUMULATED LOSSES; SOURCES OF CAPITAL

Since its inception in 1980, the Company has generated cumulative net losses of approximately \$23 million and anticipates continuing to incur operating losses for the foreseeable future. Operating results have fluctuated significantly in the past on an annual and quarterly basis, and are expected to continue to fluctuate significantly from quarter to quarter for the foreseeable future. The business historically has not generated sufficient cash flow to fund operations without resorting to external sources of capital. The Company does not have any bank financing arrangements. Operating funds have been raised primarily through the sale of equity securities in both public and private offerings, with development and demonstration contract revenues also providing limited operating cash.

The Company historically has derived the majority of its revenues from engineering and development funding provided by established companies willing to assist the Company in the development of its SCS technology and, more recently, from government sources. In 2002 and 2003, however, revenues increased substantially, providing cash to fund the majority of the Company's operating expenditure requirements. During 2002 and 2003 the Company's only customers were branches of the U.S. government and military or their prime contractors. In 2004 revenues from government sources are expected, although there can be no assurance, to provide a significant portion of the cash necessary to fund operations.

#### FINANCIAL POSITION AND LIQUIDITY

The Company operated under severe cash flow difficulties for extended periods during 2001 and 2002, prompting its two officers to voluntarily and at their own discretion defer receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements. With the generation of

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cash flow from revenues earned under contracts awarded to the Company during the second half of 2002, some of the amounts owed to the Company's officers were repaid in December 2002. Also at that time the Company's officers began receiving their current wages. During the first quarter of 2003 the Company's chief executive officer once again began deferring some of his current wages and, since April 2003, he has deferred all of his current wages. As of December 31, 2003, total such wages payable to the Company's chief executive and chief financial officers were \$190,157 and \$86,403, respectively.

The continued deferral of portions of current wages by the Company's officers cannot be expected to continue indefinitely, and the Company will be required to pay amounts outstanding as soon as cash flow permits. Similarly, the Company has accumulated significant unpaid consulting fees, the majority of which amounts as of December 31, 2003 (a total of \$122,732) are payable to two individuals. The amount and timing of payments for unpaid compensation owing to the Company's officers and its consultants will be determined at the discretion of the Company's officers; however, all such unpaid compensation is payable upon demand.

As of March 31, 2004, the Company had available cash and equivalents of approximately \$22,000 and accounts receivable, including contract costs incurred but not yet billed, of approximately \$91,500. The Company hopes, although there can be no assurance, that it will receive a follow-on award to its largest current military contract in the near future.

Management recognizes that the Company's history of operating losses, level of available funds, and revenue from current and future contracts, in relation to projected expenditures, raise substantial doubt as to the Company's ability to commence generation of significant revenues from the commercialization of the SCS and ultimately achieve profitable operations. Accordingly, the Company will continue to minimize its operating expenditures through a number of measures, including, as necessary, the deferral by its officers of portions of their salaries as described in the notes to the accompanying financial statements.

In 2003 the Company began taking steps to focus on business re-positioning, strengthening its internal capabilities, and planning for growth, engaging consultants to assess its technologies and business model and to suggest approaches for strategic alliances and commercialization services. Management concluded that significant personnel and financial resources will be required. The application of personnel and financial resources, however, is greatly constrained by the Company's liquidity problems and lack of capital.

In late February 2004 the Company hired a new president whose initial focus will be to develop and implement an updated business plan, the primary goal of which is to transition Sonex from a research and development company into a technology, commercialization, and manufacturing enterprise. There is no assurance, however, that the Company will be able to complete and implement an updated business plan.

Based upon available resources, current and projected spending levels, and expected revenue from current and anticipated contracts, management believes the Company will have sufficient capital to fund operations until approximately June 30, 2004. The Company's prospects beyond that time are dependent upon its ability to enter into significant funded contracts for the further development of its SCS technology, establish joint ventures or strategic partnerships with major industrial concerns, or secure a major capital infusion.

In the event sufficient funding is not available through the generation of revenues or from external sources, the Company would have to substantially reduce the level of its operations. Such a reduction could have a material adverse effect on the Company's relationships with government funding sources, strategic partners and potential customers.

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The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates continuity of operations, realization of assets and satisfaction of liabilities in the ordinary course of business. The propriety of use of the going concern basis is dependent upon, among other things, the Company's ability to generate sufficient revenue and ultimately achieve profitable operations. These uncertainties raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments relating to the recoverability of the carrying amounts of recorded assets or the amount of liabilities that might result from the outcome of these uncertainties.

### SALARY DEFERRALS BY OFFICERS AND EMPLOYEES

In order to help conserve the Company's limited cash resources, all of the Company's current and former officers and certain of the Company's other employees for several years have voluntarily deferred receipt of payment of significant portions of their authorized annual salaries at the request of the Board of Directors. A written agreement between these individuals and the Company was first executed in 1992 in connection with an indispensable \$2 million private investment made by a venture capital group in exchange for the issuance of a new class of convertible preferred stock. The individuals who are parties to this agreement have consented to the deferral of payment of amounts so accumulated until the Company has received licensing revenue of at least \$2 million or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow such payment. Since January 1, 1997, however, there has been no further deferral of salary requested of the Company's non-officer employees. The conditions that would require repayment of deferred amounts have yet to occur.

At the conclusion of a legal challenge by two former officers of the Company initiated in 1993 demanding full payment of deferred salaries upon the termination of their employment, in 1996 the Maryland Court of Special Appeals rejected this demand and ruled that the written agreement to defer compensation was a valid and enforceable contract.

### RESULTS OF OPERATIONS

Condensed comparative results:

[Note: In order to conform to the classifications used in 2003, certain amounts for 2002 and 2001 presented in prior years as research and development expenses (R&D) have been reclassified to cost of revenue, and interest charges included in prior years as General and Administrative (G&A) have been presented as a separate line item. The net loss for each period does not change as a result of these reclassifications.]

|                  | 2003       | 2002       | 2001       |
|------------------|------------|------------|------------|
|                  | -----      | -----      | -----      |
| Total revenue    | \$ 923,813 | \$ 471,912 | \$ 245,291 |
|                  | -----      | -----      | -----      |
| Cost of revenue  | 689,278    | 299,360    | 179,286    |
| R&D expenses     | 208,201    | 192,358    | 420,661    |
| G&A expenses     | 423,239    | 301,215    | 333,260    |
| Interest expense | 11,815     | 3,378      | 3,839      |
|                  | -----      | -----      | -----      |

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|                          |              |              |              |
|--------------------------|--------------|--------------|--------------|
| Total expenses           | 1,332,533    | 796,311      | 937,046      |
|                          | -----        | -----        | -----        |
| Net loss from operations | (408,720)    | (324,399)    | (691,755)    |
| Investment income        | 3,242        | 2,759        | 1,400        |
|                          | -----        | -----        | -----        |
| Net loss                 | \$ (405,478) | \$ (321,640) | \$ (690,355) |
|                          | =====        | =====        | =====        |

The net loss for 2003 is \$83,838, or 26%, higher than the net loss for 2002, as a significant increase in revenue was offset in part by higher associated cost of revenue and higher G&A expenses, primarily due to higher personnel costs. With the award of several significant contracts during the second half of 2002, revenue nearly doubled in 2003 versus the prior year, with related increases in expenses to support the increase in business. Total expenses were higher than would be expected with the increase in revenue because in 2003 the Company changed its method of accounting for stock-based compensation as described in the accompanying financial statements, resulting in an increase of \$59,729 in total charges for stock-based compensation, from \$30,965 in 2002 to \$90,694 in 2003.

The net loss for 2002 is \$368,715, or 53%, lower than the net loss for 2001, as a significant increase in revenue and an overall reduction in personnel costs were offset in part by higher associated cost of revenue.

The Company's revenues consist of funding received for technology development and demonstration contracts entered into with commercial or defense/government entities. Management is unable to predict future changes to development and demonstration contract revenue because the amounts earned to date under previous contracts have been determined through negotiations with such entities based upon the level of effort required and the level of funding that each entity has been willing to commit. Management anticipates, however, that future revenue may also include consulting fees earned while working together with manufacturers to optimize the results achieved on a particular manufacturer's engine, and, ultimately, license fees and royalty revenue once the Company's technology is placed into production engines by manufacturers. The future amounts of such other types of revenue cannot be reasonably estimated.

Cost of revenue primarily consists of direct labor charges and other direct expenditures, including those for consulting services, attributable to funded programs, and allocated labor overhead charges.

### Comparison of 2003 to 2002

Total revenue increased \$451,901, or 96%, from 2002 to 2003. During the second half of 2002 the Company was awarded two significant contracts and a significant subcontract from branches of the U.S. government and military or their prime contractors, with the majority of revenues from two of these projects being recognized in 2003. Revenue for 2002 also included Department of Defense (DoD) and other government revenue from four smaller contracts.

The following is a listing of the three major projects received in late 2002 which continued into 2003. Detailed discussions of each program are provided in Item 1 of this report.

Subcontract awarded by Science Applications International Corporation (SAIC), a large DoD prime contractor, for development of the Company's heavy fuel technology for military applications. Awarded third quarter of

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2002. Initial funding of \$200,000, later increased by \$81,947. Completion in 2003.

Prime contract awarded by the Defense Advanced Research Projects Agency (DARPA) for heavy fuel technology development. Awarded fourth quarter of 2002. Total funding of \$744,246. Completion in 2004.

Subcontract awarded by Compact Membrane Systems, Inc. (CMS) under its prime contract from the U.S. Department of Energy (DOE) for a Small Business Innovation Research (SBIR) Program, Phase II project for the Company's diesel emission reduction technology. Awarded fourth quarter of 2002. Total award to Sonex of \$458,862, of which \$100,000 is cost-shared (funded) by Sonex. Completion expected in 2004.

Revenues from the DARPA and CMS programs totaled \$780,099 and represented 81% of total revenues recognized in 2003, while revenues from all three of the government projects totaled \$391,155 and represented 83% of total revenues recognized in 2002.

The following table summarizes defense/government revenue recognized in each of the past three years:

|           | 2003       | 2002       | 2001       |
|-----------|------------|------------|------------|
|           | -----      | -----      | -----      |
| DARPA     | \$ 522,397 | \$ 109,024 |            |
| CMS       | 227,691    | 55,884     | \$ 20,000  |
| SAIC      | 55,700     | 226,247    |            |
| Other DoD | 118,025    | 80,757     | 125,291    |
|           | -----      | -----      | -----      |
|           | \$ 923,813 | \$ 471,912 | \$ 145,291 |
|           | =====      | =====      | =====      |

The potential revenue remaining to be recognized during 2004 in connection with the DARPA and CMS programs is \$69,991 and \$100,462, respectively. Although management anticipates that each program will be funded for the entire amount awarded to date, there is no assurance that this will be the case.

Cost of revenue increased from \$299,360 in 2002 to \$689,278 in 2003 as a result of the increased revenue generated in 2003. As more contracts were secured, a higher percentage of R&D (direct labor) personnel's time was spent on funded contracts in 2003 versus 2002, with the associated charges being recorded as cost of revenue rather than R&D. On the whole, a higher percentage of total R&D costs were classified as cost of revenue in 2003 (77%) as opposed to 2002 (61%), as new hires in 2002 and 2003 were brought on to work almost exclusively on funded contracts. The increased workload also resulted in higher direct costs, including consulting fees with the engagement of a program manager and specialized technical consultants, associated with funded contracts in 2003 versus 2002.

Comparison of 2002 to 2001

Total revenue increased \$226,621, or 92%, from 2001 to 2002. As described under "Comparison of 2003 to 2002" section above, during the second half of 2002 the Company was awarded two significant contracts and a significant subcontract from branches of the U.S. government and military or their prime contractors, while there were no revenues in 2002 from commercial contracts. DoD and other

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government revenue for 2001 came from four contracts, three of which were for development of the Company's heavy fuel technology for military applications. The three contracts in 2001 for military applications all were completed in that year, while work on the fourth contract from the government extended into early 2002.

Progress on commercial applications of the Company's diesel engine emissions reduction technology slowed considerably in 2002, but outcomes in 2003 and 2004 from two of the new defense/government projects are expected to be transferable to commercial applications. All of the revenue from commercial contracts for 2001 was earned in connection with the Company's diesel engine piston technology under a program with a foreign engine manufacturer for a feasibility study of the Company's SCAI technology in diesel truck engines. There was no follow-on work with this manufacturer once the program was completed.

Cost of revenue increased from 2001 to 2002 as a result of the increased revenue generated in 2002. As more contracts were secured, a higher percentage of R&D (direct labor) personnel's time was spent on funded contracts in 2002 versus 2001, with the associated charges being recorded as cost of revenue rather than R&D. On the whole, a higher percentage of total R&D costs were classified as cost of revenue in 2002 (61%) as opposed to 2001 (27%), as new hires in 2002 were brought on to work almost exclusively on funded contracts. The increased workload also resulted in higher direct costs associated with funded contracts in 2002 versus 2001.

Research and development (R&D) expenses:

|   | 2003       | 2002       | 2001       |
|---|------------|------------|------------|
|   | -----      | -----      | -----      |
| <b>Personnel:</b>   |            |            |            |
| Employee compensation   | \$ 391,967 | \$ 255,443 | \$ 335,605 |
| Taxes & benefits  | 60,406     | 30,491     | 54,730     |
| Stock option compensation   | 28,442     |            |            |
| Consulting fees   | 208,290    | 44,008     | 64,587     |
|   | -----      | -----      | -----      |
| Total personnel   | 689,105    | 329,942    | 454,922    |
| Project parts and supplies  | 97,907     | 66,532     | 28,116     |
| Occupancy   | 51,469     | 46,151     | 47,591     |
| Depreciation, patent amortization<br>and write-off of abandoned patents | 39,677     | 35,133     | 52,326     |
| Patent maintenance and renewal fees                                     | 12,204     | 8,022      | 7,243      |
| Other expenses  | 7,117      | 5,938      | 9,749      |
|   | -----      | -----      | -----      |
| Total R&D expenses  | 897,479    | 491,718    | 599,947    |
| <b>Less amounts classified as cost of revenue:</b>                      |            |            |            |
| Personnel   | (489,072)  | (180,928)  | (114,975)  |
| Labor overhead  | (128,053)  | (61,997)   | (59,698)   |
| Project parts and supplies  | (68,049)   | (55,637)   | (3,598)    |
| Other expenses  | (4,104)    | (798)      | (1,015)    |
|   | -----      | -----      | -----      |
| Net R&D   | \$ 208,201 | \$ 192,358 | \$ 420,661 |
|   | =====      | =====      | =====      |

The following analysis is based on a comparison of total R&D expenses as listed

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above before deduction of amounts classified as cost of revenue.

### Comparison of 2003 to 2002

Total R&D expenses increased by \$405,761, or 83%, from 2002 to 2003, primarily as a result of a significant increase in personnel costs, as well as an increase in parts and supplies.

Personnel costs increased by \$359,163, or 109%, from 2002 to 2003 due in large part to an increase in the number of personnel, including consultants, hired in response to the increase in business activity in 2003. A portion of the increase related to the Company's change in method of accounting for stock-based compensation in 2003, resulting in charges of \$28,442 in 2003 and none in 2002. Additionally, bonus awards were higher, primarily because the Company's Chief Scientist and CEO was granted a bonus of \$25,000 in 2003 versus none in 2002.

The increase in consulting fees reflects increased time spent by the consultant who serves as program manager (the same individual who serves as the Company's director of business development - see G&A discussion) as well as the charges for a fuel injection system consultant. The increase in project parts and supplies relates to greater purchases to support the new contracts. Project parts and supplies expense includes motor fuel, engine parts and other items used or consumed in engine testing and in the machine shop, as well as fabrication services.

Occupancy expenses, primarily rent, have remained relatively consistent for the past several years primarily because the monthly facility rent has not changed since March 2000. The slight increase from 2002 to 2003 reflects the increase in business activity in 2003. Rent expense is allocated 80% to R&D and 20% to G&A based on the proportionate share of floor space devoted to each category.

Total depreciation, patent amortization, and patent write-offs increased by \$4,544, or 13%, from 2002 to 2003. The largest component is depreciation expense, which increased from \$17,956 in 2002 to \$22,565 in 2003 as there were more equipment additions made in 2003 and 2002 than in recent years.

### Comparison of 2002 to 2001

Total R&D expenses decreased by \$108,229, or 18%, from 2001 to 2002, primarily as a result of a significant decrease in personnel costs, as well as a decrease in patent write-offs, offset in part by an increase in parts and supplies.

Personnel costs decreased by \$124,980, or 27%, from 2001 to 2002 due in part to large staff reductions, including consultants, at the end of 2001 and the start of 2002. The increase in the number and size of funded contracts from 2001 to 2002, however, resulted in the hiring of additional personnel during the second half of 2002, thereby partially offsetting the overall decrease in personnel costs resulting from the earlier reductions in staff.

The decrease of \$80,162, or 24%, in employee compensation was mostly due to the changes in staffing levels and to the fact that the Company's Chief Scientist and CEO was awarded a bonus of \$25,000 in 2001 but none in 2002. The decrease of \$24,239, or 44%, in payroll taxes and employee benefits from 2001 to 2002 is related to the lower total payroll as well as significantly lower health insurance costs because health insurance coverage for the Company's Chief Scientist and CEO was discontinued in early 2002 when he turned 70 years old.

The overall decrease of \$20,579, or 32%, in consulting fees from 2001 to 2002 resulted from two major factors. At the end of 2001 the Company discontinued its consulting agreement with the individual residing in Europe who served as R&D

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Supervisor and International Liaison Officer. This individual was compensated in the form of restricted stock and cash, with related charges totaling \$62,587 in 2001. (The Company measures compensation for stock issued for services at the market price on the date of award or at the agreed-upon value of the services.) This decrease was offset in part by an increase in fees for consultants, primarily for those working on funded contracts, of \$41,714, from \$2,000 in 2001 to \$43,714 in 2002 as a result of the new contracts obtained during the second half of 2002. These consulting fees were for time spent by the consultant who served as program manager (the same individual who serves as the Company's director of business development - see G&A discussion) as well as the charges for a fuel injection system consultant.

Total project parts and supplies expense increased by \$38,416 from 2001 to 2002, as a result of the increase in the number and size of funded contracts from 2001 to 2002. Project parts and supplies expense includes motor fuel, engine parts and other items used or consumed in engine testing and in the machine shop.

Occupancy expenses, primarily rent, have remained relatively consistent for the past several years except for an increase in the monthly rent in March 2000. Rent expense is allocated 80% to R&D and 20% to G&A based on the proportionate share of floor space devoted to each category.

Total depreciation, patent amortization, and patent write-offs decreased by \$17,193, or 33%, from 2001 to 2002. The largest component is patent write-offs, which were lower by \$19,830, decreasing from \$23,253 in 2001 to \$3,423 in 2002. Such write-offs represent the charging to expense of the unamortized costs of patents abandoned by the Company due to lack of expected commercial potential, and specifically relate to older patents filed in small countries. Ongoing patent amortization was approximately the same in 2002 versus 2001, as there were no new major patents granted in 2002 for which amortization of costs capitalized in prior years would begin. Depreciation expense increased slightly from \$15,441 in 2001 to \$17,956 in 2002, as there were more asset additions made in 2002 than in 2001.

### General and administrative (G&A) expenses:

|  | 2003       | 2002       | 2001       |
|--|------------|------------|------------|
|  | -----      | -----      | -----      |
| Personnel:   |            |            |            |
| Employee compensation  | \$ 154,630 | \$ 130,715 | \$ 125,557 |
| Taxes & benefits   | 11,558     | 8,916      | 10,352     |
| Stock option compensation  | 62,252     | 30,965     | 42,120     |
| Consulting fees  | 102,460    | 28,813     | 37,066     |
| Amortization of deferred compensation<br>from grant of stock options |            |            | 29,761     |
|  | -----      | -----      | -----      |
| Total personnel  | 330,900    | 199,409    | 244,856    |
| Occupancy  | 15,514     | 10,651     | 10,882     |
| Proxy solicitation & annual meeting                                  | 18,388     | 17,862     | 19,618     |
| Audit fees   | 20,350     | 9,180      | 9,450      |
| Legal fees   | 4,907      | 11,435     | 5,264      |
| Investor relations   |            | 19,942     | 1,520      |
| Stock transfer agent fees  | 8,297      | 8,098      | 8,496      |
| Other expenses   | 24,883     | 24,638     | 37,013     |
|  | -----      | -----      | -----      |
| Total G&A  | \$ 423,239 | \$ 301,215 | \$ 333,260 |
|  | =====      | =====      | =====      |

### Comparison of 2003 to 2002

Total G&A expenses increased by \$122,024, or 41%, from 2002 to 2003, primarily



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as a result of a significant increase in personnel costs, offset in part by a reduction in investor relations charges.

Employee compensation increased \$23,915, or 18%, from 2002 to 2003 primarily as a result of an increase effective January 1, 2003 in the annual salary (before deferral) of the Company's chief financial officer and the hiring in 2003 of part-time clerical help. The increase in stock option compensation, which includes amounts related to options granted to consultants and outside directors, from 2002 to 2003 of \$31,287 reflects the Company's change in method in 2003 of accounting for stock-based compensation. With the change in method, such charges in 2003 include the amortization over the related vesting period of charges associated with option grants made in prior years as well as in the current period, while there would be no charges related to prior option grants in the 2002 figure. The option charges for 2002 recorded under the previous method related entirely to consultants.

Occupancy expenses, primarily rent, increased from 2002 to 2003 because the figure for 2002 reflects an offset for sublease income, which arrangement ended in 2003. Rent expense is allocated 80% to R&D and 20% to G&A based on the proportionate share of floor space devoted to each category.

Consulting fees in total increased \$73,647 from 2002 to 2003 as the Company has expanded its marketing and commercialization capabilities in 2003 by hiring specialized consultants to provide business advisory services in areas such as strategic alliances, federal marketing, and government procurement assistance. Total professional fees (audit, legal and investor relations) decreased by \$15,200, or 37%, from 2002 to 2003, reflecting the termination at the end of 2002 of the Company's relationship with an investor relations firm engaged in the second quarter of 2002. In addition, a decline in legal services as well as an overaccrual for estimated legal fees in 2002 which was reversed in 2003 resulted in disproportionately higher charges recorded in 2002 versus 2003. These decreases were nearly offset by higher auditing fees, which more than doubled from 2002 to 2003 as the Company changed independent accountants for 2003 from a small local firm, which disbanded its public company audit practice, to a larger regional firm.

### Comparison of 2002 to 2001

Total G&A expenses decreased by \$32,045, or 10%, from 2001 to 2002, as decreases in personnel costs and other expenses were partially offset by increases in charges for investor relations services and professional fees.

Employee compensation increased only \$5,158, or 4%, from 2001 to 2002, as an increase in accrued unused vacation pay was offset in part by a decline in the use of part-time clerical help in 2002 as opposed to 2001, while the annual salary and amount of bonus awarded to the Company's chief financial officer remained the same in both years.

Consulting fees in total, including stock option compensation, decreased \$19,408, or 25%, from 2001 to 2002. Charges for services by the individual who serves as the Company's director of business development (the same individual who serves as a technical program manager) decreased \$20,733, or 30%, from \$69,186 in 2001 to \$48,453 in 2002. In 2002 and 2001 the Company paid this consultant part in cash and part in stock options for business development services. Charges paid through stock options totaled \$25,625 in 2002 versus \$42,120 in 2001. With the Company's receipt of two significant funded projects during the second half of 2002, this individual spent nearly all of his time serving as a program manager, resulting in the decrease in charges to G&A for business development services from 2001 to 2002.

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A further decrease from 2001 to 2002 of \$10,000 in consulting fees related to the former president of the Company, who was engaged on a part-time basis under a consulting agreement that provided for quarterly compensation of \$5,000. This arrangement was terminated by mutual agreement effective June 30, 2001, resulting in charges of \$10,000 in 2001. At the end of September 2001 this individual resigned from the position of president but remains on the Board of Directors. In December 2001 he agreed to waive payment of the fees for 2001; the Company accounted for this transaction by crediting the same amount to paid-in capital.

These decreases were offset in part by charges of \$11,325 for services by other consultants engaged for the first time in 2002. Such services primarily were for accounting and computer assistance, as well as for business strategy services.

Amortization of deferred compensation from grant of stock options represents annual non-cash charges in connection with a below-market option to purchase stock owned by the Company's principal shareholder granted in 1997 to the new president of the Company in order to induce him to take that position. Amortization of the related charges has been recorded over the five-year vesting period of the option, with the final portion of \$29,761 having been charged to expense in 2001.

Occupancy expenses, as well as proxy solicitation and annual meeting expenses, remained relatively unchanged from 2001 to 2002. Rent, the primary component of occupancy expenses, is allocated 80% to R&D and 20% to G&A based on the proportionate share of floor space devoted to each category.

The Company recorded higher legal fees in 2002 versus 2001 as estimates of legal fees charged to expense were found to have exceeded actual billings once a statement was received from the Company's securities legal counsel. The Company had underestimated charges for 2001 and overestimated charges for 2002, resulting in disproportionately higher charges recorded in 2002 versus 2001.

Charges for investor relations services increased substantially from \$1,520 in 2001 to \$19,942 in 2002 because during the second quarter of 2002 the Company engaged the services of an investor relations firm for the first time in a decade. This relationship was terminated effective December 31, 2002.

### CRITICAL ACCOUNTING POLICIES

A complete summary of significant accounting policies implemented by the Company is presented in Note 2 to the accompanying financial statements. The Company considers the following policies included in that summary to be critical accounting policies:

**Patents:** The costs associated with the filing of patent applications are deferred. Amortization is recorded on a straight-line basis over the remaining legal life of patents, commencing in the year in which the patent is granted. Costs related to patent applications which ultimately fail to result in the grant of a patent, as well as the unamortized costs of patents abandoned by the Company due to lack of expected commercial potential, are charged to operations at the time such determination is made.

**Revenue recognition:** Revenue derived from development and demonstration contracts is recognized upon the Company's completion of the milestones and/or submission of progress reports specified in each contract. Development contracts are executed for funding supplied by a United States Government or Department of Defense (the "Government") agency or prime contractor for proof-of-concept demonstration programs. Revenue and costs for these contracts that require the Company to provide stipulated services for a fixed price have been recognized

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using the percentage-of-completion method of accounting by relating contract costs incurred to date to total estimated contract costs at completion. Contracts which are based on costs incurred are subject to post-award audit and potential price redetermination. In connection with contracts in progress, any excess of billings over costs incurred plus estimated profit is recorded as a current liability, while any excess of costs incurred plus estimated profit over billings is recorded as a current asset, at the financial statement date. In the opinion of management, adjustments, if any, on completed contracts would not have a material adverse effect on the Company's financial position or results of operations. Commercial development contracts are executed in situations in which an engine manufacturer is willing to provide funding to partially offset the development costs incurred by the Company in applying its technology to one of the manufacturer's engines. Generally, commercial development contracts require the Company to demonstrate that the manufacturer's engine, when modified with the Company's technology, can meet certain emissions reduction and performance goals specified in the contract. In addition, these contracts sometimes provide that payment of part of the contract amount will be made only if the Company meets the specified goals. The Company is not required to repay any funds received in connection with its development contracts.

### ADOPTION OF NEW ACCOUNTING PRONOUNCEMENTS

A summary of recent accounting pronouncements is presented in Note 2 to the accompanying financial statements.

As of January 1, 2003, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 123 - "Accounting for Stock-based Compensation", which provides for the fair value based method of accounting to be applied to the Company's stock option grants and other equity-based compensation. SFAS No. 148 - "Accounting for Stock-based Compensation Transition and Disclosure", issued in December 2002, amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock options and other equity-based employee compensation. The Company has chosen to apply the "modified prospective method" of SFAS No. 148 pursuant to which fair value based stock option compensation costs for 2003 have been recognized as if the fair value based method had been used to account for all employee equity-based awards made in prior periods as well as the current period.

Prior to 2003 the Company accounted for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25 - "Accounting for Stock Issued to Employees". Under APB No. 25, compensation cost is measured as the excess, if any, of the quoted market price of the Company's stock at the date of grant over the exercise price of the option granted. Compensation cost for stock options, if any, is recognized ratably over the vesting period.

The adoption by the Company in fiscal 2004 of new accounting pronouncements which have a delayed effective date is not expected to have a material impact on its financial statements.

### ITEM 7. FINANCIAL STATEMENTS

Index to financial statements:

Reports of independent accountants

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### Financial statements:

Balance sheets as of December 31, 2003 and 2002  
Statements of operations and accumulated deficit for the three years  
ended December 31, 2003  
Statements of paid-in capital for the three years ended December 31, 2003  
Statements of cash flows for the three years ended December 31, 2003  
Notes to financial statements

### REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and  
Stockholders of Sonex Research, Inc.

We have audited the accompanying balances sheet of Sonex Research, Inc. (the "Company") as of December 31, 2003 and 2002, and the related statements of operations and accumulated deficit, paid-in capital and cash flows for the years ended December 31, 2003 and 2002, respectively. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 Sonex Research, Inc. as of December 31, 2003 and 2002, and the results of its operations and its cash flows for the years ended December 31, 2003 and 2002, respectively, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 3 to the financial statements, the Company's ability to generate sufficient revenue and ultimately achieve profitable operations remains uncertain. The Company has incurred significant net losses since its inception. The Company's future prospects depend upon its ability to demonstrate commercial viability of its products and ultimately achieve profitable operations, which raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 3. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As described in Notes 2 and 14 to the financial statements, in 2003 the Company changed its method of accounting for stock-based compensation.

HAUSSER + TAYLOR LLC

Cleveland, Ohio  
April 2, 2004

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## REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and  
Stockholders of Sonex Research, Inc.

We have audited the accompanying statements of operations and accumulated deficit, paid-in capital and cash flows for the year ended December 31, 2001 of Sonex Research, Inc. (the "Company"). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Sonex Research, Inc. for the year ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 3 to the financial statements, the Company's ability to generate sufficient revenue and ultimately achieve profitable operations remains uncertain. The Company has incurred significant net losses since its inception. The Company's future prospects depend upon its ability to demonstrate commercial viability of its products and ultimately achieve profitable operations, which raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 3. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

C. L. STEWART & COMPANY

Annapolis, Maryland  
April 10, 2002

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SONEX RESEARCH, INC.  
BALANCE SHEETS

|   | December 31, |              |
|---|--------------|--------------|
|   | 2003         | 2002         |
| ASSETS  |              |              |
| Current assets  |              |              |
| Cash and equivalents  | \$ 7,616     | \$ 105,998   |
| Accounts receivable   | 161,045      | 64,702       |
| Prepaid expenses  | 12,276       | 25,814       |
| Loans to officers and employees (Note 4)  | 20,000       | 22,500       |
| Total current assets  | 200,937      | 219,014      |
| Patents (Note 6)  | 202,518      | 203,623      |
| Property and equipment (Note 7)   | 103,005      | 58,808       |
| Total assets  | \$ 506,460   | \$ 481,445   |
| LIABILITIES AND STOCKHOLDERS' EQUITY/(DEFICIT)  |              |              |
| Current liabilities   |              |              |
| Accounts payable and other accrued liabilities  | \$ 23,904    | \$ 36,322    |
| Short-term lines of credit (Note 9)   | 22,473       |              |
| Deferred revenue - billings in excess of costs<br>and estimated profits on contracts in progress<br>(Note 8)                  | 42,834       | 66,587       |
| Current portion of capital lease obligations  | 18,413       | 5,657        |
| Notes and interest payable to shareholders (Note 9)   | 67,751       | 37,327       |
| Accrued compensation and benefits (Note 10)   | 657,494      | 427,397      |
| Total current liabilities   | 832,869      | 573,290      |
| Capital lease obligations (Note 9)  | 33,698       | 10,985       |
| Deferred compensation (Note 11)   | 965,450      | 906,856      |
| Stockholders' equity/(deficit)  |              |              |
| Preferred stock, \$.01 par value, 2,000,000<br>shares authorized and issued, 1,540,001<br>shares outstanding                  | 15,400       | 15,400       |
| Common stock, \$.01 par value, 48,000,000 shares<br>authorized, shares issued and outstanding:<br>21,592,669 in 2003 and 2002 | 215,927      | 215,927      |
| Additional paid-in capital  | 21,511,436   | 21,420,742   |
| Accumulated deficit   | (23,046,389) | (22,640,911) |
| Notes receivable from officers & employees (Note 5)   | (21,931)     | (20,844)     |
| Total stockholders' equity/(deficit)  | (1,325,557)  | (1,009,686)  |
| Commitments (Note 16)   |              |              |

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Total liabilities and stockholders' equity/(deficit) \$ 506,460 \$ 481,445  
 =====

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

SONEX RESEARCH, INC.  
 STATEMENTS OF OPERATIONS AND ACCUMULATED DEFICIT

|  | Year ended December 31, |                 |                 |
|--|-------------------------|-----------------|-----------------|
|  | 2003                    | 2002            | 2001            |
| Revenue  |                         |                 |                 |
| Defense/government                                   | \$ 923,813              | \$ 471,912      | \$ 145,291      |
| Commercial   |                         |                 | 100,000         |
|  | 923,813                 | 471,912         | 245,291         |
| Costs and expenses                                   |                         |                 |                 |
| Cost of revenue                                      | 689,278                 | 299,360         | 179,286         |
| Research and development                             | 208,201                 | 192,358         | 420,661         |
| General and administrative                           | 423,239                 | 301,215         | 333,260         |
| Interest expense                                     | 11,815                  | 3,378           | 3,839           |
|  | 1,332,533               | 796,311         | 937,046         |
| Net loss from operations                             | (408,720)               | (324,399)       | (691,755)       |
| Investment income                                    | 3,242                   | 2,759           | 1,400           |
| Net loss   | (405,478)               | (321,640)       | (690,355)       |
| Accumulated deficit                                  |                         |                 |                 |
| Beginning of period                                  | (22,640,911)            | (22,319,271)    | (21,628,916)    |
| End of period  | \$ (23,046,389)         | \$ (22,640,911) | \$ (22,319,271) |
| Weighted average number of common shares outstanding | 21,592,669              | 21,495,529      | 20,224,090      |
| Net loss per share (basic and diluted)               | \$ (.019)               | \$ (.015)       | \$ (.034)       |

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

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SONEX RESEARCH, INC.  
STATEMENTS OF PAID-IN CAPITAL

|   | Price<br>per<br>share | Preferred stock<br>(\$ .01 per share)<br>Shares | Amount   | Common stock<br>(.01 par value)<br>Shares | Amount    | Additional<br>paid-in<br>capital |
|---|-----------------------|---|----------|---|-----------|----------------------------------|
| Balance, January 1, 2001  |                       | 1,540,001                                       | \$15,400 | 19,479,868                                | \$194,799 | \$20,927,437                     |
| March private placement   | .25                   |   |          | 300,000                                   | 3,000     | 72,000                           |
| March for services  | .25                   |   |          | 54,577                                    | 546       | 13,098                           |
| April private placement   | .25                   |   |          | 125,000                                   | 1,250     | 30,000                           |
| June private placement  | .20                   |   |          | 325,000                                   | 3,250     | 61,750                           |
| June for services   | .29                   |   |          | 44,916                                    | 449       | 12,667                           |
| August payment of stock<br>subscription                                 | .20                   |   |          | 25,000                                    | 250       | 4,750                            |
| September for services  | .25                   |   |          | 55,000                                    | 550       | 13,200                           |
| October private placement   | .15                   |   |          | 750,000                                   | 7,500     | 105,000                          |
| December for services   | .25                   |   |          | 53,308                                    | 533       | 12,794                           |
| December forgiveness of<br>payables                                     |                       |   |          |   |           | 10,000                           |
| Stock option compensation   |                       |   |          |   |           | 42,120                           |
| Amortization of deferred<br>compensation from grant<br>of stock options |                       |   |          |   |           | 29,761                           |
| Balance, December 31, 2001  |                       | 1,540,001                                       | 15,400   | 21,212,669                                | 212,127   | 21,334,577                       |
| March private placement   | .15                   |   |          | 360,000                                   | 3,600     | 50,400                           |
| May for services  | .25                   |   |          | 12,000                                    | 120       | 2,880                            |
| July for services   | .25                   |   |          | 8,000                                     | 80        | 1,920                            |
| Stock option compensation   |                       |   |          |   |           | 30,965                           |
| Balance, December 31, 2002  |                       | 1,540,001                                       | 15,400   | 21,592,669                                | 215,927   | 21,420,742                       |
| Stock-based compensation  |                       |   |          |   |           | 90,694                           |
| Balance, December 31, 2003  |                       | 1,540,001                                       | \$15,400 | 21,592,669                                | \$215,927 | \$21,511,436                     |

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

SONEX RESEARCH, INC.  
STATEMENTS OF CASH FLOWS

|   | Year ended December 31, |              |              |
|---|-------------------------|--------------|--------------|
|   | 2003                    | 2002         | 2001         |
| Cash flows from operating activities          |                         |              |              |
| Net loss                                      |                         | \$ (405,478) | \$ (321,640) |
| Adjustments to reconcile net loss to net cash |                         |              | \$ (690,355) |



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|  |           |            |           |
|--|-----------|------------|-----------|
| provided by (used in) operating activities                                     |           |            |           |
| Depreciation   | 26,889    | 17,956     | 15,441    |
| Amortization of patents  | 17,112    | 17,177     | 36,885    |
| Amortization of deferred compensation<br>from grant of stock options           |           |            | 29,761    |
| Current charges paid in stock or options                                       |           | 35,965     | 95,957    |
| Stock-based compensation   | 90,694    |            |           |
| Accrued interest on loans to/notes<br>from employees                           | (1,087)   | (2,719)    |           |
| Accrued interest on notes to shareholder                                       | 3,307     | 1,327      |           |
| (Increase) decrease in accounts receivable                                     | (96,343)  | (26,874)   | (20,488)  |
| (Increase) decrease in prepaid expenses  | 13,538    | (32)       | 1,359     |
| Increase (decrease) in accrued liabilities                                     | 217,679   | 195,569    | 128,569   |
| Increase (decrease) in billings in excess of<br>costs on contracts in progress | (23,753)  | 66,587     |           |
| Increase (decrease) in deferred compensation                                   | 58,594    | 48,912     | 47,100    |
|  | -----     | -----      | -----     |
| Net cash provided by (used in)<br>operating activities                         | (98,848)  | 32,228     | (355,771) |
|  | -----     | -----      | -----     |
| Cash flows from investing activities   |           |            |           |
| (Increase) decrease in loans to/notes<br>from employees                        | 2,500     |            |           |
| Acquisition of property and equipment  | (20,333)  | (1,869)    | (3,664)   |
| Additions to patents   | (16,007)  | (16,712)   | (25,266)  |
|  | -----     | -----      | -----     |
| Net cash provided by (used in) investing<br>activities                         | (33,840)  | (18,581)   | (28,930)  |
|  | -----     | -----      | -----     |
| Cash flows from financing activities   |           |            |           |
| Issuance of stock - private placements   |           | 54,000     | 288,750   |
| Increase (decrease) in short-term lines<br>of credit                           | 22,473    |            |           |
| Issuance of notes payable to shareholders                                      | 85,000    | 36,000     |           |
| Payment of principal on notes to shareholders                                  | (55,000)  |            |           |
| Payment of accrued interest on notes to<br>shareholders                        | (2,883)   |            |           |
| Reduction of capital lease obligations   | (15,284)  | (1,004)    |           |
| Forgiveness of payables  |           |            | 10,000    |
|  | -----     | -----      | -----     |
| Net cash provided by (used in) financing<br>activities                         | 34,306    | 88,996     | 298,750   |
|  | -----     | -----      | -----     |
| Increase (decrease) in cash  | (98,382)  | 102,643    | (85,951)  |
| Cash at beginning of period  | 105,998   | 3,355      | 89,306    |
|  | -----     | -----      | -----     |
| Cash at end of period  | \$ 7,616  | \$ 105,998 | \$ 3,355  |
|  | =====     | =====      | =====     |
| Non-cash transactions:   |           |            |           |
| Equipment acquired through capital<br>lease obligations                        | \$ 50,753 | \$ 17,646  |           |
|  | =====     | =====      |           |

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

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### SONEX RESEARCH, INC. NOTES TO FINANCIAL STATEMENTS

#### NOTE 1 - THE COMPANY

Sonex Research, Inc. has developed a proprietary technology, known as the Sonex Combustion System (SCS), which improves the combustion of fuel in internal combustion engines through modification of the pistons in large engines or the cylinder heads in small engines. The SCS achieves in-cylinder control of ignition and combustion to increase fuel mileage of gasoline engines, reduce emissions of diesel engines, and permit small gasoline engines to run on safer diesel-type fuels. The Company's objective is to execute broad agreements with engine and parts manufacturers for industrial production of SCS components under license from Sonex.

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Presentation of financial statements: Certain reclassifications have been made to the financial statements of the prior years to conform to the classifications used in 2003, most notably the reclassification of amounts in the Statement of Operations from Research and Development to Cost of Revenue and from General and Administrative to Interest Expense.

Cash and equivalents: The Company's By-Laws restrict the types of permitted investments to securities issued by the U.S. Treasury, savings accounts insured by the U.S. Government, or investment companies that invest in obligations of the U.S. Government or its agencies. The Federal Deposit Insurance Corporation (FDIC) insures bank balances up to \$100,000. At any point in time, the Company's bank balances may exceed the FDIC insurance limit. The Company considers all short-term, highly liquid investments which are convertible into cash within three months or less to be cash equivalents.

Patents: The costs associated with the filing of patent applications are deferred. Amortization is recorded on a straight-line basis over the remaining legal life of patents, commencing in the year in which the patent is granted. Costs related to patent applications which ultimately fail to result in the grant of a patent, as well as the unamortized costs of patents abandoned by the Company due to lack of expected commercial potential, are charged to operations at the time such determination is made.

Property and equipment: Property and equipment is stated at cost or, in the case of leased equipment under capital leases, at the present value of future lease payments, less accumulated depreciation. Major renewals and betterments are capitalized and ordinary repair and maintenance expenditures are charged to operations in the year incurred. Depreciation is computed using the straight line method over useful lives of three to seven years.

Revenue recognition: Revenue derived from development and demonstration contracts is recognized upon the Company's completion of the milestones and/or submission of progress reports specified in each contract. Development contracts are executed for funding supplied by a United States Government or Department of Defense (the "Government") agency or prime contractor for proof-of-concept demonstration programs. Revenue and costs for these contracts that require the Company to provide stipulated services for a fixed price have been recognized using the percentage-of-completion method of accounting by relating contract costs incurred to date to total estimated contract costs at completion. Contracts which are based on costs incurred are subject to post-award audit and

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potential price redetermination. In connection with contracts in progress, any excess of billings over costs incurred is recorded as a current liability, while any excess of costs incurred over billings is recorded as a current asset, at the financial statement date. In the opinion of management, adjustments, if any, on completed contracts would not have a material adverse effect on the Company's financial position or results of operations.

Commercial development contracts are executed in situations in which an engine manufacturer is willing to provide funding to partially offset the development costs incurred by the Company in applying its technology to one of the manufacturer's engines. Generally, commercial development contracts require the Company to demonstrate that the manufacturer's engine, when modified with the Company's technology, can meet certain emissions reduction and performance goals specified in the contract. In addition, these contracts sometimes provide that payment of part of the contract amount will be made only if the Company meets the specified goals. The Company is not required to repay any funds received in connection with its development contracts.

Stock-based compensation: As of January 1, 2003, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 123 - "Accounting for Stock-based Compensation" issued by the Financial Accounting Standards Board (FASB), which provides for the fair value based method of accounting to be applied to the Company's stock option grants and other equity-based compensation. SFAS No. 148 - "Accounting for Stock-based Compensation - Transition and Disclosure", issued in December 2002, amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock options and other equity-based employee compensation. The Company has chosen to apply the "modified prospective method" of SFAS No. 148 pursuant to which fair value based stock option compensation costs for 2003 have been recognized as if the fair value based method had been used to account for all employee equity-based awards made in prior periods as well as the current period.

Prior to 2003 the Company accounted for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25 - "Accounting for Stock Issued to Employees". Under APB No. 25, compensation cost is measured as the excess, if any, of the quoted market price of the Company's stock at the date of grant over the exercise price of the option granted. Compensation cost for stock options, if any, is recognized ratably over the vesting period.

Net loss per share: Net loss per share is computed based upon the weighted average number of common shares outstanding during the year. Potentially dilutive securities, which include convertible preferred stock, stock options and warrants, would serve to reduce the loss per share and, accordingly, are excluded from the computation.

Use of estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and notes. Actual results may differ from those estimates.

Major customers: During 2003 and 2002 the Company's only customers were branches of the U.S. government and military or their prime contractors. Revenues generated from two such customers under contracts-in-progress represented 81% of total revenues in 2003.

Concentration of credit risk: The Company maintains part of its cash in bank deposit accounts at financial institutions. At times, the balances in such accounts may exceed the FDIC insurance limitation of \$100,000 per account. The

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Company's accounts receivable at December 31, 2003 consist entirely of uncollateralized customer obligations due under normal business terms from branches of the U.S. government and military or their prime contractors. Based on the Company's collection experience and the creditworthiness of such customers, management concluded that no allowance for doubtful accounts was necessary.

New accounting standards: SFAS No. 148 issued in December 2002 also amends the disclosure provisions of SFAS No. 123 and APB Opinion No. 28, "Interim Financial Reporting." The Statement is effective for fiscal years beginning after December 15, 2002.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." This statement amends and clarifies financial reporting for derivative instruments, including certain derivative instruments embedded in other contracts and for hedging activities under SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." This statement is effective for contracts entered into or modified after June 30, 2003, and for hedging relationships designated after June 30, 2003. The Company currently has no derivative instruments and undertakes no hedging activities.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." This statement establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. SFAS No. 150 was originally to be effective for financial instruments entered into or modified after May 31, 2003, and otherwise was to be effective at the beginning of the first interim period beginning after June 15, 2003. In November 2003, FASB issued FASB Staff Position 150-3 which delays or defers indefinitely the effective date of certain provisions of SFAS No. 150.

In January 2003, the FASB issued Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities", an interpretation of Accounting Research Bulletin No. 51. FIN 46 requires certain variable interest entities, or VIEs, to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all VIEs created or acquired after January 31, 2003. For VIEs created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after June 15, 2003. The Company currently has no contractual relationship or other business relationship with a variable interest entity.

The adoption of the new standards did not, or is not expected to, materially affect the Company's financial position and results of operations.

### NOTE 3 - LIQUIDITY

Management recognizes that the Company's history of operating losses, level of available funds, and revenue from current and future contracts, in relation to projected expenditures, raise substantial doubt as to the Company's ability to commence generation of significant revenues from the commercialization of the SCS and ultimately achieve profitable operations. Accordingly, the Company will continue to minimize its operating expenditures through a number of measures, including, as necessary, the deferral by its officers of portions of their salaries as described in Notes 10 and 11.

Based upon available resources, current and projected spending levels, and expected revenue from current and anticipated contracts, management believes the

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Company will have sufficient capital to fund operations until approximately June 30, 2004. The Company's prospects beyond that time are dependent upon its ability to enter into significant funded contracts for the further development of its SCS technology, establish joint ventures or strategic partnerships with major industrial concerns, or secure a major capital infusion. There is no assurance that the Company will be able to achieve these other objectives; therefore, there remains substantial doubt about the Company's ability to continue as a going concern.

### NOTE 4 - LOANS TO OFFICERS AND EMPLOYEES

Loans to officers and employees represent the remaining balance of amounts advanced in prior years for the payment of income tax liabilities incurred by these individuals upon their receipt of compensation in the form of shares of the Company's common stock. The loans, which are non-interest bearing, are secured by deferred salaries payable to each of the borrowers. The loans became payable on December 31, 2003; however, no payments have been made subsequent to that date, nor has the Company demanded such payment.

### NOTE 5 - NOTES RECEIVABLE FROM OFFICERS AND EMPLOYEES

In connection with the exercise of warrants to purchase shares of common stock in June 2000, the Company accepted notes receivable from its chief financial officer and two other employees aggregating \$18,125. The notes, payable on or before June 30, 2005, are secured by the shares issuable upon the exercise of the warrants and deferred salaries payable to each of the individuals. Interest on the notes is charged at 6% per annum, with a total of \$3,806 having been accrued as of December 31, 2003. Because these notes receivable arise from the issuance of common stock, the amounts are presented in the accompanying balance sheet as deductions from stockholders' equity/(deficit).

### NOTE 6 - PATENTS

The costs capitalized by the Company in connection with the filing of patent applications consist primarily of charges for services of patent attorneys and filing fees paid to countries. The net unamortized capitalized costs of patents is comprised of the following:

|                          | December 31, |            |
|--------------------------|--------------|------------|
|                          | 2003         | 2002       |
| Capitalized costs        | \$ 279,658   | \$ 264,532 |
| Accumulated amortization | (77,140)     | (60,909)   |
|                          | -----        | -----      |
|                          | \$ 202,518   | \$ 203,623 |
|                          | =====        | =====      |

Amortization of patent costs was \$16,231 in 2003, \$13,754 in 2002, and \$13,632 in 2001. Annual patent cost amortization is expected to range from \$15,000 to \$20,000 over the next five years.

The Company continues to conduct its own research and development activities which have resulted in additional patents. Development of commercial applications of certain elements of the SCS has commenced and management

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believes the capitalized cost of patents will be recovered through revenue derived from the licensing of the underlying technology. Management closely monitors the patent application process and other factors which may affect the economic value of the Company's technology, and reduces the capitalized cost of patents should the recovery of such costs no longer be sustainable. In connection with patents abandoned by the Company due to lack of expected commercial potential, unamortized costs of \$881 in 2003, \$3,423 in 2002, and \$23,253 in 2001 were charged to operations and reflected as additional amortization in the accompanying financial statements.

### NOTE 7 - PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

|                          | December 31, |            |
|--------------------------|--------------|------------|
|                          | 2003         | 2002       |
|                          | -----        | -----      |
| Shop equipment           | \$ 543,428   | \$ 474,940 |
| Office equipment         | 24,823       | 22,225     |
|                          | -----        | -----      |
|                          | 568,251      | 497,165    |
| Accumulated depreciation | (465,246)    | (438,357)  |
|                          | -----        | -----      |
|                          | \$ 103,005   | \$ 58,808  |
|                          | =====        | =====      |

### NOTE 8 - DEFERRED REVENUE

In connection with contracts in progress, the Company records the gross amount of any excess of billings over costs incurred and estimated profit or loss as deferred revenue, a current liability, while any excess of costs incurred over billings is recorded as a current asset. There were no contracts for which costs and estimated profits incurred exceeded billings as of December 31, 2003 or 2002. Deferred revenue is analyzed as follows:

|   | December 31, |            |
|---|--------------|------------|
|   | 2003         | 2002       |
|   | -----        | -----      |
| Total billings                              | \$ 674,255   | \$ 401,858 |
| Costs incurred and estimated profit or loss | (631,421)    | (335,271)  |
|   | -----        | -----      |
| Deferred revenue                            | \$ 42,834    | \$ 66,587  |
|   | =====        | =====      |

### NOTE 9 - DEBT

Notes payable to shareholders: In connection with a private financing in March 2002 as detailed in Note 13, the Company issued a \$6,000, 6% note to one of its shareholders, initially payable on June 30, 2002, that is convertible to equity at the option of the holder. The due date of the note has been extended several times and is currently due on June 30, 2004.

In July 2002 the Company issued a \$30,000, 8% note to this same shareholder

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payable initially on January 31, 2003. The due date of the note was extended to September 30, 2003. The Company issued a \$50,000, 6% note in June 2003 to this same shareholder payable initially on December 31, 2003. The due date of this note has been extended to June 30, 2004. In July 2003 the Company paid the July 2002, 8%, \$30,000 note in full, including all remaining unpaid interest.

In October 2003 the Company issued a \$25,000, short-term, 6% note to this same shareholder, which note and related interest were paid in full in November 2003. As of December 31, 2003, two notes to this shareholder in the principal amount totaling \$56,000, with accrued interest totaling \$1,728, remain outstanding. Payment of both notes is secured by Company revenues. In December 2003 the Company issued a \$10,000, short-term, 6% note to another shareholder, with interest of \$23 having accrued through December 31, 2003. Payment of this note was secured by a specific invoice for revenue billed in December 2003 under one of the Company's contracts. In January 2004 the Company paid this note in full, including all accumulated interest.

Short-term lines of credit: In March 2003 the Company obtained a business credit card from Capital One Bank with a credit limit of \$20,000 to facilitate the purchase of equipment and materials. Repayment of amounts due has been personally guaranteed by the Company's chief executive officer. Balances accrue interest at a fixed rate of 8.9% per annum. In October 2003 the Company refinanced \$18,050 then outstanding on this credit card by transferring the balance to a new business credit card from Fleet National Bank. Repayment of amounts due on this credit card, which has a credit limit of \$19,000, also has been personally guaranteed by the Company's chief executive officer. The account has a promotional interest rate of 0% through June 2004, adjusting to prime rate + 6% thereafter. As of December 31, 2003, the outstanding balance on the account with Fleet National Bank was \$17,550, while the balance on the account with Capital One Bank was \$4,923.

Capital lease obligations: The Company has incurred long-term capital lease obligations in connection with the acquisition of equipment in the following amounts:

|                                 | December 31, |           |
|---------------------------------|--------------|-----------|
|                                 | 2003         | 2002      |
| Total capital lease obligations | \$ 52,111    | \$ 16,642 |
| Less: current portion           | (18,413)     | (5,657)   |
| Long-term portion               | \$ 33,698    | \$ 10,985 |
|                                 | =====        | =====     |

During 2003 the Company incurred new capital lease obligations in the principal amount of \$50,753. The repayment of two four-year equipment lease obligations in the principal amount of \$46,598 included in this total has been personally guaranteed by the Company's chief executive officer. As of December 31, 2003, the aggregate outstanding principal balance on these two leases obligations was \$37,949.

### NOTE 10 - ACCRUED COMPENSATION AND BENEFITS

Accrued compensation and benefits consists of the following amounts:

December 31,  
-----

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|                                 | 2003       | 2002       |
|---------------------------------|------------|------------|
|                                 | -----      | -----      |
| Accrued wages and payroll taxes | \$ 299,635 | \$ 235,515 |
| Accrued consulting fees         | 150,181    | 31,737     |
| Accrued bonuses                 | 154,068    | 95,499     |
| Accrued vacation pay            | 53,610     | 64,646     |
|                                 | -----      | -----      |
|                                 | \$ 657,494 | \$ 427,397 |
|                                 | =====      | =====      |

The Company operated under severe cash flow difficulties for extended periods during 2001 and 2002, prompting its two officers to voluntarily and at their own discretion defer receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements. With the generation of cash flow from revenues earned under contracts awarded to the Company during the second half of 2002, some of the amounts owed to the Company's officers were repaid in December 2002. Also at that time the Company's officers began receiving their current wages. During the first quarter of 2003 the Company's chief executive officer once again began deferring some of his current wages and, since April 2003, he has deferred all of his current wages. As of December 31, 2003, total such wages payable to the Company's chief executive and chief financial officers were \$190,157 and \$86,403, respectively.

The continued deferral of portions of current wages by the Company's officers cannot be expected to continue indefinitely, and the Company will be required to pay amounts outstanding as soon as cash flow permits. Similarly, the Company has accumulated significant unpaid consulting fees, the majority of which amounts as of December 31, 2003 (a total of \$122,732) are payable to two individuals. The amount and timing of payments for unpaid compensation owing to the Company's officers and its consultants will be determined at the discretion of the Company's officers; however, all such unpaid compensation is payable upon demand, as these amounts are not subject to the terms of the Company's written agreement with current and former personnel to defer payment of portions of their compensation as described in Note 11.

In December of each year, the Company awards bonuses to its officers and employees with the stipulation that payment of such bonuses is to be deferred until the Board of Directors determines that the Company's cash resources are sufficient to enable such payments. In connection with a private placement in March 2002 as detailed in Note 13, the Company paid \$22,500 of bonuses accrued as of December 31, 2001 and \$4,500 of consulting fees accrued as of that date through the conversion of such amounts to equity. The amount of accrued bonuses included in the table above that was payable to the Company's officers at December 31, 2003 is \$122,500. Payment of accrued bonuses is not subject to the terms of the Company's written agreement with current and former personnel to defer payment of portions of their compensation as described in Note 11.

The Company's only liability to employees for future compensated absences is for accrued but unused vacation pay. The amount of vacation pay earned by employees is determined by job classification and length of service. The amount of accrued vacation included in the table above that was payable to the Company's officers at December 31, 2003 and 2002 was \$49,200 and \$48,856, respectively. Accrued vacation compensation is payable upon termination of employment, and such payments are not subject to the terms of the Company's written agreement with current and former personnel to defer payment of portions of their compensation as described in Note 11.

NOTE 11 - DEFERRED COMPENSATION



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In order to help conserve the Company's limited cash resources, all of the Company's current and former officers and certain of the Company's other employees for several years voluntarily deferred receipt of payment of significant portions of their authorized annual salaries at the request of the Board of Directors. A written agreement between these individuals and the Company was first executed in 1992 in connection with an indispensable \$2 million private investment made by a venture capital group in exchange for the issuance of a new class of convertible preferred stock as described in Note 13. The individuals who are parties to this agreement have consented to the deferral of payment of amounts so accumulated until the Company has received licensing revenue of at least \$2 million or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow such payment.

Deferred compensation outstanding is payable to the following classifications of personnel:

|  | December 31, |            |
|--|--------------|------------|
|  | 2003         | 2002       |
| Current officers                           | \$ 641,749   | \$ 574,249 |
| Current employees                          | 12,504       | 12,504     |
| Former officers, employees and consultants | 311,197      | 320,103    |
|  | \$ 965,450   | \$ 906,856 |
|  | =====        | =====      |

The amount reported above for deferred compensation payable to current officers as of December 31, 2003 consists of \$486,423 payable to the Company's chief executive officer and \$155,326 payable to its chief financial officer. As of January 1, 2004, the Company's chief executive officer is being compensated as a consultant rather than a salaried employee, with related compensation not subject to the terms of the written agreement described above for the deferral of payment of current compensation. Also as of January 1, 2004, the Company's chief financial officer is no longer deferring any portion of his current salary.

The conditions that would require repayment of deferred amounts have yet to occur, and it is unlikely that such conditions will occur prior to December 31, 2004. Accordingly, such deferred compensation is reported separately in the accompanying balance sheet as a non-current liability.

At the conclusion of a legal challenge by two former officers of the Company initiated in 1993 demanding full payment of deferred salaries upon the termination of their employment, in 1996 the Maryland Court of Special Appeals rejected this demand and ruled that the written agreement to defer compensation was a valid and enforceable contract.

### NOTE 12 - INCOME TAXES

The Company has not incurred any federal or state income taxes since its inception due to operating losses. At December 31, 2003, the Company had net operating loss ("NOL") carryforwards of approximately \$11.2 million available to offset future taxable income. Net operating losses generated in 1998 and subsequent years may be carried forward twenty years, while such losses generated in 1997 and prior years may be carried forward fifteen years. If certain substantial changes in the Company's ownership should occur, there would be an annual limitation on the amount of the carryforwards which can be utilized. The Company's tax loss carryforwards are summarized as follows:

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| Expiration  | Amount        |
|-------------|---------------|
| 2004        | \$ 1,185,181  |
| 2005        | 900,267       |
| 2006        | 1,060,169     |
| 2007        | 1,214,492     |
| 2008        | 1,018,962     |
| 2009 - 2012 | 3,801,836     |
| 2018 - 2023 | 2,071,909     |
|             | \$ 11,252,816 |
|             | =====         |

The difference between the net operating loss carryforwards described above and the accumulated deficit reported in these financial statements results principally from (1) temporary differences for income tax and financial reporting purposes relating to the amounts and timing of deductibility of deferred salaries and compensation related to the grant of stock options, and the differences in the accounting for the Company's investment in its former consolidated subsidiary for income tax and financial reporting purposes, and (2) permanent differences principally due to the non-deductibility for income tax purposes of a significant charge to operations for debt conversion expense in a prior year and the non-deductibility of compensation related to the exercise of stock options recorded previously in the Company's accounts.

The potential income tax benefit of these loss carryforwards and temporary differences of approximately \$4.3 million has not been recorded in the financial statements due to the uncertainty of realization based on the Company's financial performance to date. Since 1995 net operating loss carryforwards aggregating \$7,964,415 have expired unused.

### NOTE 13 - CAPITAL STOCK

Authorized capital stock: The Company is presently authorized to issue 48 million shares of \$.01 par value common stock and 2 million shares of \$.01 par value convertible preferred stock. All of the authorized shares of preferred stock, along with common stock purchase warrants, were issued for \$2 million in February 1992 (the "Preferred Stock Investment") to a small number of individuals who qualified as "accredited investors" pursuant to Rule 501 of Regulation D of the Securities Act of 1933 (the "Act") and to Proactive Partners, L.P. and certain of its affiliates ("Proactive"), who became the largest beneficial owner of the Company's common stock by virtue of the acquisition of the convertible preferred stock and common stock purchase warrants.

The preferred stock has priority in liquidation over the common stock, but it carries no stated dividend. The holders of the preferred stock, voting as a separate class, have the right to elect that number of directors of the Company which represents a majority of the total number of directors. The preferred stock is convertible at any time at the option of the holder into common stock at the rate of \$.35 per share of common stock. As of December 31, 2003 a total of 459,999 shares of preferred stock had been converted into 1,314,278 shares of common stock.

Exercise of warrants; Private placements of common equity: In a private financing during March and April 2001 the Company raised \$106,250 from a small number of the Company's shareholders, including its chief executive officer and

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chief financial officer, most of whom participated in previous private financings of the Company. A total of 425,000 shares of the Company's common stock and five-year warrants to purchase an additional 425,000 shares of common stock at \$.50 per share were issued in this financing.

In a private financing in June 2001 the Company issued 350,000 shares of common stock for proceeds of \$70,000 received from a small group of the Company's shareholders, most of whom participated in previous private financings of the Company. A portion of the proceeds was in the form of a subscription receivable of \$5,000, which amount was received in August 2001.

In a private financing in October 2001 the Company issued 750,000 shares of common stock for proceeds of \$112,500 received from a small group of the Company's shareholders, including its chief executive officer and chief financial officer, most of whom participated in previous private financings of the Company.

In a private financing at the end of March 2002, the Company raised capital of \$60,000, including \$27,000 in cash investments, \$27,000 from the conversion to equity of accrued liabilities to officers, employees and consultants, and cash proceeds of \$6,000 through the issuance of a short-term note that is convertible to equity at the option of the holder. A total of 360,000 shares of the Company's common stock and five-year warrants to purchase an additional 180,000 shares of common stock at \$.25 per share were issued in this financing, and 60,000 shares were reserved for future issuance upon the conversion of the note payable to common stock and a warrant to purchase common stock.

The offer and sale of the shares of common stock and warrants to purchase shares of common stock in connection with each of the private financings described above satisfied the conditions of Rule 506 of Regulation D of the Act and, as such, were exempt from the registration requirements of Section 5 of the Act as transactions not involving any public offering within the meaning of Section 4(2) of the Act.

### NOTE 14 - STOCK OPTIONS

The Company maintains a non-qualified stock option plan created in 1987 (the "Plan") which has made available for issuance a total of 7.5 million shares of common stock. All directors, full-time employees and consultants to the Company are eligible for participation. Option awards are determined at the discretion of the Board of Directors. Upon a change in control of the Company, all outstanding options granted to employees and directors become vested with respect to those options which have not already vested. Options outstanding expire at various dates through December 2013.

Between January 1, 2001 and December 31, 2003, the Company had the following activity in options to purchase shares of common stock under the Plan:

|                                | # of shares<br>----- | Weighted<br>average<br>exercise<br>price<br>----- | # of shares<br>exercisable<br>----- | Weighted<br>average<br>exercise<br>price<br>----- |
|--------------------------------|----------------------|---|-------------------------------------|---|
| Unexercised at January 1, 2001 | 4,323,216            | \$.51   | 3,760,716                           | \$.52   |
| Granted                        | 882,500              | .25   | 411,250                             | .25   |
| Becoming exercisable           |                      |   | 405,000                             | .48   |

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|                                  |           |       |           |       |
|----------------------------------|-----------|-------|-----------|-------|
| Exercised                        |           |       |           |       |
| Lapsed                           | (671,400) | .50   | (657,650) | .50   |
|                                  | -----     |       | -----     |       |
| Unexercised at December 31, 2001 | 4,534,316 | .46   | 3,919,316 | .49   |
| Granted                          | 498,242   | .25   | 340,492   | .25   |
| Becoming exercisable             |           |       | 378,750   | .29   |
| Exercised                        |           |       |           |       |
| Lapsed                           | (509,500) | .50   | (509,500) | .50   |
|                                  | -----     |       | -----     |       |
| Unexercised at December 31, 2002 | 4,523,058 | .43   | 4,129,058 | .45   |
| Granted                          | 568,415   | .25   | 248,415   | .25   |
| Becoming exercisable             |           |       | 258,000   | .25   |
| Exercised                        |           |       |           |       |
| Lapsed                           | (407,566) | .48   | (275,066) | .59   |
|                                  | -----     |       | -----     |       |
| Unexercised at December 31, 2003 | 4,683,907 | \$.40 | 4,360,407 | \$.42 |
|                                  | =====     | ===== | =====     | ===== |

In December 1997 Proactive, the Company's principal shareholder, granted to the new president of the Company a ten-year option, exercisable 20% per year beginning with the date of grant, to purchase 714,286 shares of common stock owned by Proactive at an exercise price of \$.35 per share. In December 1999 Proactive granted the Company's president a ten-year option, exercisable 25% per year beginning with the date of grant, to purchase an additional 500,000 shares of common stock owned by Proactive at an exercise price of \$.50 per share. The options granted by Proactive are not covered by the Company's Plan. Because these agreements relate to shares which are already outstanding, the exercise of these options will not result in an increase in the total number of the Company's outstanding shares, nor will the Company receive any cash proceeds upon the exercise of the options.

Through December 31, 2002, the Company accounted for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25. Under APB No. 25, compensation cost is measured as the excess, if any, of the quoted market price of the Company's stock at the date of grant over the exercise price of the option granted. Compensation cost for stock options, if any, is recognized ratably over the vesting period. Although the Company applied APB Opinion No. 25 in accounting for stock option compensation, Statement of Financial Accounting Standards (SFAS) No. 123 - "Accounting for Stock-based Compensation", which provides for the fair value based method of accounting to be applied to stock option grants and other equity-based compensation, required the Company to make certain disclosures as if the fair value based method of accounting had been applied to the Company's stock option grants.

Prior to 2003, for options granted with an exercise price below the market price at the date of grant, the Company credited an amount to additional paid-in capital representing the excess of the aggregate market value at the date of grant over the aggregate exercise price of such options, and charged a like amount to compensation expense in that year. There were no such charges in 2002 or 2001 in connection with options granted under the Plan. Certain consultants engaged by the Company agreed to be compensated partially in cash and partially in stock options. While the exercise price of such options was equal to or higher than the market price of the stock at each date of grant, the Company recorded compensation expense equal to the value of the consultants' services which are payable by such stock options. Such charges aggregated \$30,965 in 2002

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and \$42,120 in 2001, with like amounts credited to additional paid-in capital.

In connection with the grant of the option in 1997 by Proactive to the new president of the Company, \$29,761 in 2001 was credited to additional paid-in capital and a like amount amortized to compensation expense. Amortization of such charges, recorded over the five-year vesting period of the option, was completed as of December 31, 2001. There were no such charges for the option granted by Proactive in December 1999 to the president of the Company because the exercise price exceeded the market price of the stock at the date of grant.

As of January 1, 2003, the Company voluntarily adopted SFAS No. 123. SFAS No. 148 - "Accounting for Stock-based Compensation - Transition and Disclosure", issued in December 2002, amended SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock options and other equity-based employee compensation. The Company chose to apply the "modified prospective method" of SFAS No. 148 pursuant to which fair value based stock option compensation costs for 2003 have been recognized as if the fair value based method had been used to account for all employee stock-based awards made in prior periods as well as the current period.

For purposes of determining equity-based compensation expense under SFAS No. 123 in 2003 as well as for the pro forma disclosures required in previous years, the Company has estimated the grant date fair value of stock options using the Black-Scholes option pricing model. The following weighted average assumptions were utilized for 2003: volatility factor of 95%, average risk-free interest rate of 3.3%, zero dividend yield, and average expected term of nine years. As a result, for 2003 the Company recorded stock option compensation under SFAS No. 123 totaling \$90,694 based on a weighted average fair value per share for options granted during 2003, 2002, 2001, and 2000 of \$.13, \$.15, \$.19, and \$.37, respectively. As was the case under APB Opinion No. 25, the amount of compensation expense is also credited to additional paid-in capital.

Had compensation cost for options granted been determined in prior periods consistent with the method of SFAS No. 123, the Company's net loss and net loss per share for the previous two years on a pro forma basis would have been as follows:

|                                  | 2002<br>----- | 2001<br>----- |
|----------------------------------|---------------|---------------|
| Net loss - as reported           | \$321,640     | \$690,355     |
| Net loss - pro forma             | \$465,693     | \$948,089     |
| Net loss per share - as reported | \$.015        | \$.034        |
| Net loss per share - pro forma   | \$.022        | \$.047        |

The Black-Scholes valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable, as opposed to the type of compensatory options granted by the Company. It also requires the input of highly subjective assumptions, such as the expected stock price volatility, changes in which can materially affect the fair value estimate. Because the options granted by the Company have characteristics significantly different from those of traded options, the amounts calculated using the Black Scholes option valuation model, in the opinion of management, do not necessarily provide a reliable single measure of the fair value of options granted by the Company.

NOTE 15- COMMON STOCK RESERVED FOR FUTURE ISSUANCE

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As of December 31, 2003, a total of 11,516,832 shares of common stock were reserved by the Company for issuance for the following purposes:

| Purpose   | # of shares |
|---|-------------|
| -----   |             |
| Currently exercisable warrants:                           |             |
| Exercisable at \$.50 per share, expiring in December 2005 | 387,500     |
| Exercisable at \$.50 per share, expiring in March 2006    | 250,000     |
| Exercisable at \$.50 per share, expiring in April 2006    | 175,000     |
| Exercisable at \$.25 per share, expiring in March 2007    | 180,000     |
|   | -----       |
|   | 992,500     |
| Currently exercisable options:                            |             |
| Exercisable at \$.25 per share                            | 1,602,207   |
| Exercisable at \$.50 per share                            | 2,562,200   |
| Exercisable at \$.75 per share                            | 196,000     |
|   | -----       |
|   | 4,360,407   |
|   | -----       |
| Granted options becoming exercisable in the future:       |             |
| Exercisable at \$.25 per share                            | 323,500     |
| Options available for future grants                       | 1,380,425   |
| Conversion of note payable                                | 60,000      |
| Conversion of preferred stock                             | 4,400,000   |
|   | -----       |
| Total shares reserved                                     | 11,516,832  |
|   | =====       |

In February and March 2002 warrants exercisable at \$.75 per share to purchase 387,759 shares of common stock expired unexercised.

### NOTE 16 - COMMITMENTS

The Company occupies its office and laboratory facility on a month-to-month basis under the terms of an operating lease agreement pursuant to which the property owner is required to provide thirty days notice if he wants the Company to vacate the premises. The lease currently provides for monthly rent of \$4,000 and requires the Company to pay all property related expenses. Gross rent charges aggregated \$48,000 in 2003, 2002 and 2001, while the Company also earned sublease income of \$4,050 and \$3,000 in 2002 and 2001, respectively. The Company will seek to negotiate a new long-term lease for its facility or search for an alternative location in the event that an agreement cannot be reached for the existing premises. Management believes that the resolution of the uncertainty with respect to the facility will not result in a significant interruption in the operations of the Company.

In February 2004 the Company hired a new president to fill the position that had been vacant and entered into a long-term employment agreement with this individual as more fully described in Note 17.

### NOTE 17- SUBSEQUENT EVENTS

The composition of the Company's Board of Directors changed substantially following the resignation in late January and early February 2004 of three

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independent directors who had served on the Board for several years. Each of these former directors cited other business responsibilities as the reason for his resignation. The only continuing member of the Board is the Company's Chief Executive Officer. Named to the Board to serve on an interim basis were the Company's Chief Financial Officer and one independent director, and the number of members of the Board was reduced from four to three.

In 2003 the Company began taking steps to focus on business re-positioning, strengthening its internal capabilities, and planning for growth. Management identified a need to secure strong strategic alliances for the marketing and commercialization of the SCS engine applications by leveraging technology development currently supported by U.S. Government funding as well as seeking relationships with companies which have technologies complementary to the SCS. One of the first objectives on this path was to strengthen the Company's management team.

In late February 2004 the Company's reconstituted Board of Directors hired a new president to fill the position that had been vacant and entered into an employment agreement with this individual. The Company's new president is developing and implementing an updated business plan. In late March 2004 he replaced the Company's Chief Financial Officer as a member of the Board of Directors. The employment agreement, which expires in March 2006, requires the new president to defer annually \$68,000 of his \$140,000 salary until the expiration of the agreement or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow payment. Other key terms of the employment agreement include non-compete provisions, the payment of shares of common stock and the award of stock options which vest over the first year as detailed below, and the award of a bonus of \$33,000 upon execution of the agreement, the payment of which bonus will be deferred until the expiration of the agreement. The agreement also specifies that termination of employment by the Company following a change in control results in payment of three times annual salary and bonus and the immediate vesting of shares and options which have not already vested.

In connection with this change in business strategy, in February and March 2004 the Company entered into other business agreements, obtained a short-term loan from a shareholder, authorized additional compensation to its officers and directors, and satisfied liabilities for accrued compensation, through the issuance of, and the grant of options for, a substantial number of shares of common stock, as follows:

Shares issued:

| Description<br>-----                                  | Price/<br>share<br>----- | # of shares<br>----- |
|---|--------------------------|----------------------|
| Under employment agreement with new president: (1)    |                          |                      |
| Upon execution of agreement                           | \$.10                    | 200,000              |
| Held in escrow, vesting in three, six and nine months | .10                      | 600,000              |
| Compensation to management and employee               | .10                      | 250,000              |
| Payment of accrued compensation                       | .12                      | 400,000              |
| Loan origination fee                                  | .12                      | 10,000               |
| Upon execution of agreement with new legal counsel    | .12                      | 1,000,000            |
| Consulting services                                   | .10                      | 780,000              |
| Compensation to independent director                  | .12                      | 200,000              |
|   |                          | -----                |
| Total   |                          | 3,440,000            |

(1) The Company's president is purchasing these shares for cash of \$.01 per

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share. The \$.09 per share discount between the purchase price and the market price of the stock of \$.10 per share is accounted for as compensation expense.

Options granted, all with ten-year terms:

| Description<br>-----                               | Exercise<br>price<br>----- | # of shares<br>----- |
|--|----------------------------|----------------------|
| Under employment agreement with new president: (1) |                            |                      |
| Vesting at grant date                              | \$.25                      | 100,000              |
| Vesting six months after grant date                | .50                        | 100,000              |
| Vesting 12 months after grant date                 | 1.00                       | 100,000              |
| Vesting 18 months after grant date                 | 1.50                       | 100,000              |
| Vesting 24 months after grant date                 | 2.00                       | 100,000              |
|  |                            | -----                |
|  |                            | 500,000              |
| To new directors, vesting immediately              | .25                        | 50,000               |
|  |                            | -----                |
| Total  |                            | 550,000              |

(1) These options were not granted under the Company's existing stock option plan.

The employment agreement with the Company's president also requires the issuance of 200,000 shares of common stock on March 15, 2005. The agreement with the new legal counsel also requires the Company to remit a cash retainer of \$50,000 by June 30, 2004. Shares issued for consulting services represent payment in connection with a one-year agreement with a firm providing business development, product planning, corporate structure and financial advisory services. This consulting firm introduced the new president to the Company and has been assisting him in the development and implementation of the Company's updated business plan. The Company has reserved for future issuance an additional 420,000 shares of common stock for services under this consulting agreement.

The transactions described above which involved the issuance of shares of common stock will result in material effects on the Company's financial statements for the first quarter of 2004. For shares issued in connection with the two agreements with an extended term and/or vesting provisions, related charges of \$210,000 will be recorded as deferred assets with amortization of amounts to expense ratably over the period covered by the agreement. For shares issued and earned immediately upon execution of the agreement with new legal counsel, the related charges of \$120,000 will be expensed in March 2004.

### ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

The Company has had no disagreements with its current independent accountants, Hausser + Taylor LLC, on any matter of accounting principles or practices or financial statement disclosure. Hausser + Taylor LLC has been the Company's independent accountants since December 17, 2002.



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### ITEM 8A. CONTROLS AND PROCEDURES

#### Disclosure Controls and Procedures

The Company's chief executive officer and chief financial officer have evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934) as of the end of the period covered by this report. Based on such evaluation they have concluded that, as of the evaluation date, the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed in reports that the Company files or submits under the Exchange Act, is recorded, processed, summarized and reported in a timely manner.

#### Internal Control over Financial Reporting

It is the responsibility of the Company's management to establish and maintain adequate internal control over financial reporting. Due to its small size and limited financial resources, however, the Company's chief financial officer, a member of management, is the only accounting and financial reporting employee. As a result, there is no segregation of duties within the accounting function, leaving all aspects of financial reporting and physical control of cash and equivalents in the hands of the same employee. Usually, this lack of segregation of duties represents a material weakness in a company's internal control over financial reporting.

The Company's Board of Directors has recognized this inherent material weakness in internal control but has been unable to adequately address the situation as long as the Company has not had the financial resources to hire additional accounting staff and the numerous responsibilities of the Company's chief executive officer, the only other member of management until the beginning of 2004, have precluded his participation in the internal control function. Despite these difficulties, the Board of Directors feels that the Company's chief financial officer, who has been a member of management since 1991, has demonstrated his trustworthiness and loyalty to the Company and its shareholders. Based on its faith in the chief financial officer, as well as the oversight provided by the Company's independent accountants, the Board of Directors is confident that there have been no irregularities in the Company's financial reporting or in the protection of its assets as a result of this potentially material weakness in the Company's internal control over financial reporting, and that, under the circumstances, internal control over financial reporting as of December 31, 2003 is as effective as is possible.

There have been no changes in the Company's internal control over financial reporting since December 31, 2003 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting; however, the Company hired an additional member of management, its new president, in February 2004. As soon as is practical, the Board of Directors will consider the assignment of specific duties for various aspects of internal control over financial reporting to its chief executive officer and its president. In addition, the Company plans to hire a controller as soon as the financial condition of the Company permits.

### PART III

### ITEM 9. DIRECTORS, EXECUTIVE OFFICERS AND CONTROL PERSONS

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The Company's Board of Directors is divided into two categories: (1) "Common Stock" directors elected by the holders of Common Stock; and (2) "Preferred Stock" directors elected by the holders of Preferred Stock. Pursuant to the Company's Charter, the holders of the Preferred Stock, voting as a separate class, have the right to elect that number of directors of the Company which represents a majority of the total number of directors. These two categories of directors are further divided into three classes as nearly equal in number as possible, with the term of one of the three classes of directors expiring at each annual meeting of shareholders. The members of each class of directors are to hold office for terms of three years until their successors have been elected and qualified. The terms of Class I, Class II and Class III directors are scheduled to expire at the annual meeting of shareholders to be held in 2005, 2006, and 2004, respectively.

The Company's By-laws state that the Board of Directors shall consist of not fewer than three directors, with the total number of directors to be set by the Board by resolution. In July 1997 the total number of directors was fixed at five, and, from December 2001 through March 2003 the Board consisted of three Preferred Stock directors and two Common Stock directors. On March 24, 2003, Mr. John H. Drewanz, a Class II Common Stock director since October 2001 and Chairman of the Company's Board of Directors since October 2002, resigned from the Board. The Board of Directors subsequently decided against filling the vacancy or naming a new Chairman. In July 2003 the Board of Directors acted to fix the number of directors at four, consisting of three Preferred Stock directors and one Common Stock director.

In late January and early February 2004, the three Preferred Stock directors, Mr. Lawrence H. Hyde, Mr. Charles C. McGettigan, and Mr. Myron A. Wick, III, resigned from the Board, citing other business responsibilities as the reason for resignation. The only continuing member of the Board was the Company's Chief Executive Officer, Dr. Andrew A. Pouring, a Class III Common Stock director. In connection with the resignations, the total number of directors was fixed at three, consisting of two Preferred Stock directors and one Common Stock director. Named to the Board on an interim basis were the Company's Chief Financial Officer, Mr. George E. Ponticas, to serve as a Class I Preferred Stock director, and one independent director, Mr. Herbert J. Mitschele, Jr., the holder of approximately 5% of the Company's issued and outstanding Common Stock, to serve as a Class II Preferred Stock director.

In late February 2004 the Company's reconstituted Board of Directors hired a new president, Mr. Roger D. Posey, to fill the position that had been vacant. In March 2004 Mr. Ponticas resigned from the Board and Mr. Posey was named to replace him as a Class I Preferred Stock director. Because each was elected by the Board to fill a vacancy rather than by the shareholders at an annual meeting, the terms of Mr. Posey and Mr. Mitschele will expire at the next (2004) Annual Meeting of Shareholders. At that time, these two individuals, or such other person(s) as may be validly nominated to fill the vacancy, shall be elected by the shareholders to serve the remaining scheduled term as Class I and Class II, respectively, Preferred Stock directors or until successors have been elected and qualified.

The Company will seek to add qualified individuals who have no current affiliation with the Company in order to constitute a Board with a majority of independent directors.

Directors of the Company do not receive fees for their services, but are eligible to receive stock option grants and restricted shares, and are reimbursed for expenses related to their activities as directors. Executive officers are appointed and serve at the discretion of the Board of Directors.

Board Committees

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Due to the small total number of directors, the Board does not have separate Executive, Nominating, Compensation or Audit Committees; however, the functions of these committees have been performed by the Board as a whole. The Company does not have an Audit Committee charter. The Board believes its outside directors possess the necessary independence and skills to perform all the functions normally assigned to separate Nominating, Compensation or Audit Committees.

Prior to their recent resignations, Mr. Hyde and Mr. McGettigan, based on their education and business experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements, were designated as an audit committee "financial experts" with respect to Audit Committee functions that are performed by the Board as a whole. In general, an audit committee "financial expert" means an individual who possesses (i) an understanding of generally accepted accounting principles and financial statements; (ii) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves; (iii) experience preparing, auditing, analyzing or evaluating financial statements containing the breadth and level of complexity of accounting issues that are generally comparable to such issues encountered by the small business issuer's financial statements; (iv) an understanding of internal controls and procedures for financial reporting; and (v) an understanding of audit committee functions. The Board currently has no member designated as a "financial expert".

In performing the duties typically assigned to an audit committee, the entire Board of Directors has (1) reviewed and discussed the 2003 audited financial statements of the Company with management; (2) discussed with the independent accountants of the Company the independent accountants' judgments about the quality, not just the acceptability, of the Company's accounting principles, including the clarity and completeness of the financial statements and related note disclosures; (3) received written assurance from the independent accountants with respect to independence; and (4) recommended that the 2003 audited financial statements be included in the December 31, 2003 Annual Report on Form 10-KSB for filing with the Securities and Exchange Commission (SEC).

The function of recommending potential nominees for Board positions is performed by the Board as a whole. It is also the policy of the Board to consider nominees recommended by security holders. Such recommendations should be addressed to the Secretary, at the address of the Company, and should include the name and address of the security holder submitting the nomination and a detailed listing of the business experience and particular qualifications of the nominee. The Board will review the nomination at its next meeting following receipt of the nomination and respond accordingly to the security holder who submitted the nomination.

### Background of Directors and Executive Officers

The names, ages, dates first elected as directors, and principal occupations and employment of the directors and executive officers of the Company are set forth below.

| Name                       | Age | Term as<br>director<br>expires | Position                       |
|----------------------------|-----|--------------------------------|--------------------------------|
| -----                      |     |                                |                                |
| Preferred Stock Directors: |     |                                |                                |
| Herbert J. Mitschele, Jr.  | 74  | 2004                           | Class II Director              |
| Roger D. Posey             | 51  | 2004                           | President and Class I Director |

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### Common Stock Director:

|                   |    |      |   |
|-------------------|----|------|---|
| Andrew A. Pouring | 72 | 2004 | Chief Executive Officer, Chief Scientist, and Vice Chairman of the Board (Class III Director) |
|-------------------|----|------|---|

### Other Executive Officer:

|                    |    |  |  |
|--------------------|----|--|--|
| George E. Ponticas | 44 |  | Vice President - Finance, Secretary, Treasurer and Chief Financial Officer |
|--------------------|----|--|--|

Mr. Herbert J. Mitschele, Jr. has been a director of the Company since February 2004. Mr. Mitschele is a retired business owner who has been a shareholder of the Company for approximately twenty years. He received his B.S. in Business and Administration from Fordham University.

Mr. Roger D. Posey has been a director of the Company since March 2004. Prior to joining Sonex, Mr. Posey held management and operational leadership positions with CSX Transportation, Inc., Noise Cancellation Technologies Inc., and Tenneco Automotive Inc. Recently Mr. Posey personally directed a successful turnaround of a large privately held metals manufacturing company which realized exponential growth. In addition, Mr. Posey has considerable experience in bringing technology to the commercial marketplace. He is a member of a number of professional organizations, including the Acoustical Society of America, Institute of Noise Control Engineers, American Industrial Hygiene Association, among others; further, he has written and published several technical articles, presented within the U.S. and throughout the World. Mr. Posey holds a B.S. degree in Science Education from the University of Maryland.

Dr. Andrew A. Pouring has been a full-time employee, director, and Chief Scientist of the Company since 1980, serving as President from April 1980 through November 1991, and as Chief Executive Officer since May 1985. In November 1991 he was elected a Vice Chairman of the Board of Directors. He has co-authored all of the Company's patented inventions. Prior to forming Sonex, Dr. Pouring served as a Professor of Aerospace Engineering at the U.S. Naval Academy, including four years as the Chairman of the Academy's Department of Aerospace Engineering. Dr. Pouring is a member of various professional and scientific societies, including the American Society of Mechanical Engineers and the Society of Automotive Engineers. Dr. Pouring received his Bachelors and Masters degrees in mechanical engineering from Rensselaer Polytechnic Institute. He received his Doctor of Engineering degree from Yale University, where he also was a post doctoral research fellow and lecturer.

Mr. George E. Ponticas has been Vice President of Finance, Chief Financial Officer, Secretary and Treasurer of the Company since September 1991. From May 1987 through August 1991, he served as the Company's Controller and Assistant Secretary. He served as a director of the Company during February and March 2004. Prior to joining Sonex, Mr. Ponticas was a member of the auditing staff of Price Waterhouse in Baltimore, Maryland, attaining the position of audit manager. Mr. Ponticas is a Certified Public Accountant, and is a member of the American Institute of Certified Public Accountants and the Maryland Association of Certified Public Accountants. He received his B.S. in Accounting from Loyola College in Maryland.

### Code of Ethics

Recently enacted Item 406 of Regulation S-B of the Exchange Act requires disclosure of whether the Company has adopted a code of ethics that applies to its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and to explain why if it has not adopted such a code of ethics. For purposes of Item 406, the term "code of ethics" refers to written standards that are reasonably

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designed to (1) deter wrongdoing and to promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; (2) ensure full, fair, accurate, timely, and understandable disclosure in public reports, documents and communications; (3) ensure compliance with applicable governmental laws, rules and regulations; (4) ensure the prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and (5) provide accountability for adherence to the code.

Adoption of a written code of ethics requires the expenditure of time and funds. The Company has not adopted such a written code of ethics due to its small size and limited financial resources. The Board of Directors intends to adopt a code of ethics for the relevant officers of the Company as soon as funding and staffing permit.

### Compliance with Section 16(A) of the Exchange Act

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's officers and directors, and persons who beneficially own more than 10% of a registered class of the Company's equity securities, to file initial reports of beneficial ownership and reports of changes in beneficial ownership with the SEC, and to provide copies of all such reports to the Company. Based solely on its review of the copies of such reports received by it, or written representations from certain reporting persons that no reports were required for those persons, the Company believes that all of its officers, directors, and greater than 10% shareholders complied with all such filing requirements related to beneficial ownership of Common Stock during 2003 with the following exceptions: Dr. Andrew A. Pouring and Mr. George E. Ponticas, the Company's Chief Executive and Chief Financial Officers, respectively, failed to file Form 4s to report the December 31, 2003 grant to each of them of ten-year options vesting 25% per year to purchase 100,000 and 50,000 shares, respectively, of Common Stock at an exercise price of \$.25 per share, which exercise price was higher than the December 31, 2003 market price of \$.13 of the Company's publicly traded Common Stock. The Company expects the required Form 4s to be filed in the near future.

### ITEM 10. EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by the Company to its chief executive officer and any other executive officer who earned annual compensation during the most recently completed year in excess of \$100,000 (together referred to as the "Named Executives").

SUMMARY COMPENSATION TABLE

| Name and Position                              | Year | Annual compensation |           | Accrued bonus | Long-term compensation # of options |
|--|------|---------------------|-----------|---------------|-------------------------------------|
|  |      | Salary              |           |               |                                     |
|  |      | Current             | Deferred  |               |                                     |
| Dr. Andrew A. Pouring<br>CEO & Chief Scientist | 2003 | \$ 87,500 (1)       | \$ 37,500 | \$ 25,000     | 100,000                             |
|  | 2002 | 87,500 (1)          | 37,500    | 0             | 100,000 (3)                         |
|  | 2001 | 87,500 (1)          | 37,500    | 10,000        | 35,000                              |
| Mr. George E. Ponticas<br>CFO & Secretary      | 2003 | \$ 90,000           | \$ 30,000 | \$ 25,000     | 50,000                              |
|  | 2002 | 86,400 (2)          | 9,600     | 25,000        | 200,000                             |
|  | 2001 | 86,400 (2)          | 9,600     | 25,000        | 100,000                             |

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- (1) Includes \$76,567 for 2003, \$79,933 for 2002 and \$33,657 for 2001 which has not been paid as of December 31, 2003
- (2) Includes \$53,171 for 2002 and \$33,232 for 2001 which has not been paid as of December 31, 200
- (3) In November 2002 Dr. Pouring was granted an option to purchase 100,000 shares of Common Stock effective as of January 1, 2003.

In order to help conserve the Company's limited cash resources, however, the Named Executives for several years have voluntarily deferred receipt of payment of significant portions of their authorized annual salaries upon request by the Board of Directors. By written agreement with the Company, these individuals and other current and former employees consented to the deferral of payment of amounts so accumulated until the Company has received licensing revenue of at least \$2 million or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow such payment. The conditions that would require repayment of deferred amounts have yet to occur, and it is unlikely that such conditions will occur during 2004. (Note: At the conclusion of a legal challenge by two former officers of the Company initiated in 1993 demanding full payment of deferred salaries upon the termination of their employment, in 1996 the Maryland Court of Special Appeals rejected this demand and ruled that the written agreement to defer compensation was a valid and enforceable contract.)

For many years through 1998, Dr. Pouring had been deferring 40% of his annual salary. In January 1999, the percentage deferral was reduced to 30%. For many years through 2002, Mr. Ponticas had been deferring 10% of his annual salary. The authorized full annual salary for Dr. Pouring has been \$125,000 for the past three years, while the salary for Mr. Ponticas was increased in 2003 from \$96,000 to \$120,000, with 25% of the salary being deferred. As of January 1, 2004, Dr. Pouring is being compensated as a consultant rather than a salaried employee, with related compensation not subject to the terms of the written agreement described above for the deferral of payment of current compensation. Also as of January 1, 2004, Mr. Ponticas is no longer deferring any portion of his authorized salary. As of December 31, 2003, a total of \$486,423 and \$155,326 in deferred salary is owed to Dr. Pouring and Mr. Ponticas, respectively, that is payable under the conditions described above.

The Company operated under severe cash flow difficulties for extended periods during 2001 and 2002, prompting its two officers to voluntarily and at their own discretion defer receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements. With the generation of cash flow from revenues earned under contracts awarded to the Company during the second half of 2002, some of the amounts owed to the Company's officers were repaid in December 2002. Also at that time the Company's officers began receiving their current wages. During the first quarter of 2003 Dr. Pouring once again began deferring some of his current wages and, since April 2003, he has deferred all of his current wages. As of December 31, 2003, total such wages payable to Dr. Pouring and Mr. Ponticas were \$190,157 and \$86,403, respectively.

In December of each of the past several years, the Company has awarded bonuses, totaling \$65,077 in 2003, \$37,500 in 2002, and \$57,500 in 2001, to its officers and employees, including the amounts reported above for the Named Executives. The bonus awards in each year were made with the stipulation that payment of such bonuses would be deferred until the Board of Directors determines that the Company's cash resources are sufficient to enable such payments. In a private financing in March 2002, Dr. Pouring and Mr. Ponticas accepted Common Stock in payment of accrued bonuses of \$9,000 each. As of December 31, 2003, \$47,500 and \$75,000 in accrued bonuses remained payable to Dr. Pouring and Mr. Ponticas, respectively.

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The bonus awards and option grants to the Named Executives reflect the fact since 2001 these individuals have made extraordinary sacrifices, both financially in the amount of wages that have gone unpaid, and personally, to enable the Company to remain in operation given its poor financial condition, and to provide incentive for the Named Executives to remain in the employment of the Company under such difficult continuing conditions.

In order to avoid long-term financial commitments, through 2003 the Company did not execute employment agreements with any of its personnel. The salaries of executive officers are set by the Board of Directors on an annual basis. With the exception of the granting of stock options, the Company does not pay its Named Executives any bonuses or any type of long-term compensation in the form of restricted stock awards, stock appreciation rights (SARs) or other form of long-term incentive plan payments.

### OPTION GRANTS IN LAST FISCAL YEAR

| Individual Grants |   |  |                |              |                 |
|-------------------|---|--|----------------|--------------|-----------------|
| Name              | Number of securities underlying options granted | % of total options granted to employees in fiscal year | Exercise price | Market price | Expiration date |
| Pouring           | 100,000   | 45%  | \$.25          | \$.1313      | Dec. 30, 2013   |
| Ponticas          | 50,000  | 23%  | \$.25          | \$.13        | Dec. 30, 2013   |

### AGGREGATED OPTION/SAR EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION/SAR VALUES

| Name             | # of shares acquired on exercise | Value realized | Number of securities underlying unexercised options/SARs at December 31, 2003 | Value of unexercised in-the-money options/SARs at December 31, 2003 |
|------------------|----------------------------------|----------------|---|---|
|                  |                                  |                | Exercisable/<br>Unexercisable   | Exercisable/<br>Unexercisable                                       |
| <b>Pouring:</b>  |                                  |                |   |   |
| @ \$.25          | 0                                | \$0            | 185,000 / 150,000   | \$0/\$0   |
| @ \$.50          | 0                                | \$0            | 105,000 / 0   | \$0/\$0   |
| @ \$.75          | 0                                | \$0            | 25,000 / 0  | \$0/\$0   |
| <b>Ponticas:</b> |                                  |                |   |   |
| @ \$.25          | 0                                | \$0            | 342,500 / 37,500  | \$0/\$0   |
| @ \$.50          | 0                                | \$0            | 175,000 / 0   | \$0/\$0   |
| @ \$.75          | 0                                | \$0            | 20,000 / 0  | \$0/\$0   |

The exercise price of all options held by the Named Executives was higher than the December 31, 2003 market price of \$.13 of the Company's publicly traded Common Stock.

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### ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The Company has two classes of voting securities: its \$.01 par value common stock (the "Common Stock") and its \$.01 par value convertible preferred stock (the "Preferred Stock"). Each share of Preferred Stock is convertible at any time at the option of the holder into Common Stock at the rate of \$.35 per share of Common Stock. The Preferred Stock has priority in liquidation over the Common Stock, but it carries no stated dividend. Additionally, the holders of Preferred Stock, voting as a separate class, have the right to elect that number of directors of the Corporation which represents a majority of the total number of directors. The only other matters with respect to which holders of Preferred Stock are entitled to vote concern a consolidation, merger, share exchange or transfer of assets.

The Company is presently authorized to issue up to 48 million shares of Common Stock and 2 million shares of Preferred Stock. There were 25,032,669 shares of Common Stock and 1,540,001 shares of Preferred Stock issued and outstanding at March 31, 2004.

The following table sets forth as of March 31, 2004 information relating to beneficial ownership of Common Stock by directors and executive officers of the Company, individually and as a group, and any other persons known by the Company to be the beneficial owner of more than five percent of the currently issued and outstanding Common Stock of the Company. A reporting person is considered the "beneficial owner" of a security if that person has or shares the power to vote or to direct the voting of such security, or the power to dispose or to direct the disposition of such security. Under this definition, more than one person may be a beneficial owner of securities as to which he has no record ownership interest, and the same shares may be beneficially owned by more than one reporting person.

Beneficial ownership includes securities which the reporting person currently owns or has the right to acquire within sixty days, such as through the exercise of options and warrants or through the conversion of preferred stock. The percentage of beneficial ownership for a reporting person is based on the number of outstanding shares of common stock of the Company plus the number of shares which the reporting person has the right to acquire within sixty days, but does not include shares which any other reporting person has the right to acquire. Unless otherwise noted, all shares are beneficially owned and sole voting and investment power is held by the persons named.

#### TOTAL BENEFICIAL OWNERSHIP

| Name and address (1)      | Common<br>shares<br>owned | Rights to<br>acquire<br>shares (2) | Total shares<br>beneficially<br>owned | Percent<br>of class |
|---------------------------|---------------------------|------------------------------------|---------------------------------------|---------------------|
| Herbert J. Mitschele, Jr. | 1,281,655                 | 90,000                             | 1,371,655                             | 5.5                 |
| George E. Ponticas        | 626,262                   | 643,928                            | 1,270,190                             | 4.9                 |
| Roger D. Posey            | 200,000                   | 100,000                            | 300,000 (3)                           | 1.2                 |
| Andrew A. Pouring         | 1,053,239                 | 408,928                            | 1,462,167                             | 5.7                 |

All directors and officers



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|  |           |           |           |      |
|--|-----------|-----------|-----------|------|
| as a group (4 persons)                     | 3,161,156 | 1,242,856 | 4,404,012 | 16.8 |
| Proactive, et.al. (4)<br>San Francisco, CA | 2,198,064 | 2,928,570 | 5,126,634 | 18.3 |
| Lawrence H. Hyde (5)                       | 600,000   | 1,839,286 | 2,484,272 | 9.7  |

- 
- (1) The business address for each director and named executive officer is 23 Hudson Street, Annapolis, Maryland, 21401.
  - (2) See detail provided in the following table.
  - (3) Does not include 600,000 shares issued to Mr. Posey under his employment agreement which are held in escrow until they vest 200,000 shares at a time on May 31, 2004, August 31, 2004, and November 30, 2004, respectively, with continued employment.
  - (4) Includes shares beneficially owned directly and indirectly by Proactive Partners, L.P. and affiliated entities and individuals ("Proactive, et.al.") including former directors of the Company Charles C. McGettigan and Myron A. Wick, III, as reported in a Form 13D filing with the SEC.
  - (5) Mr. Hyde is a former director, Chairman of the Board, and president of the Company.

### RIGHTS TO ACQUIRE SHARES

| Name   | Exercisable<br>options | Exercisable<br>(put)/<br>call (1) | Preferred<br>stock<br>warrants<br>converted | Total<br>rights to<br>acquire<br>shares |
|--|------------------------|-----------------------------------|---|---|
| Herbert J. Mitschele, Jr.                            | 60,000                 |                                   | 25,000                                      | 40,000                                  |
| George E. Ponticas                                   | 562,500                |                                   | 80,000                                      | 1,428                                   |
| Roger D. Posey                                       | 100,000                |                                   |   | 100,000                                 |
| Andrew A. Pouring                                    | 315,000                |                                   | 92,500                                      | 1,428                                   |
| All directors and officers<br>as a group (4 persons) | 1,002,500              |                                   | 197,500                                     | 42,856                                  |
| Proactive , et.al.<br>San Francisco, CA              |                        | (1,214,286)                       | 4,142,856                                   | 2,928,570                               |
| Lawrence H. Hyde                                     | 600,000                | 1,214,286                         |   | 1,839,286                               |

- 
- (1) Represents the currently exercisable portions of ten-year options granted in December 1997 and December 1999 by Proactive, et.al. to Mr. Hyde to purchase 714,286 shares and 500,000 shares, respectively, of common stock presently owned by Proactive, et.al., at an exercise price of \$.35 and \$.50 per share, respectively. The December 1997 and December 1999 options become exercisable at the rate of 20% and 25% respectively, per year beginning with the date of grant. Because these agreements relate to shares which are already outstanding, the exercise of such rights will not result in an increase in the total number of the Company's outstanding shares for purposes of computing the percentage of beneficial ownership of each reporting person.

### ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

None.

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### ITEM 13. EXHIBITS LIST AND REPORTS ON FORM 8-K

#### (a) Exhibits.

- 3 Articles of Incorporation and Bylaws (as amended) - Incorporated by reference to the Company's Annual Report on Form 10-KSB for the year ended December 31, 1992.
- 4 Instruments defining the rights of security holders (contained in Exhibit 3 hereof).
- 10.1 1987 Non-Qualified Stock Option Plan, as amended - Incorporated by reference to the Company's Registration Statement No. 33-34520 on Form S-8.
- 10.2 Employment Agreement dated February 23, 2004 with Roger D. Posey, president.
- 10.3 Stock Option Agreement dated February 23, 2004 with Roger D. Posey, president.
- 21 Subsidiaries of the Registrant: Sonex International, B.V. - The Netherlands; Sonex Engines, Inc. - Delaware (both are inactive).
- 23.a Consent of Hausser + Taylor LLC.
- 23.b Consent of C.L. Stewart & Company.
- 24 Power of Attorney
- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32 Certification of Form 10-KSB for the year ended December 31, 2003 pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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

During the fourth quarter of 2003, the Company filed the following Current Report on Form 8-K:

On October 2, 2003, to disclose that it had been awarded a \$165,000 contract for application of its heavy fuel engine technology.

### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

#### Audit Fees

During 2003 the Company's current independent accountants, Hausser + Taylor LLC, billed the Company a total of \$20,350 for professional services rendered for the audit of the Company's 2002 annual financial statements and review of interim financial statements included in the Company's quarterly Form 10-QSB filings for 2003. Audit fees include fees associated with the annual audit and the reviews of the Company's quarterly reports and for fees for services that are normally provided by the accountants in connection with statutory and regulatory filings or engagements.

Hausser + Taylor LLC (the "Firm") has a continuing relationship with American Express Tax and Business Services, Inc. ("TBS") from which it leases auditing staff who are full time, permanent employees of TBS and through which its shareholders provide non-audit services. As a result of this arrangement, the Firm has no full time employees and, therefore, none of the audit services performed were provided by permanent full time employees of the Firm. The Firm manages and supervises the audit and audit staff, and is exclusively responsible for the opinion rendered in connection with its audit.

During 2002 the Company's previous independent accountants, C.L. Stewart and

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Company, billed the Company a total of \$9,180 for professional services rendered for the audit of the Company's 2001 annual financial statements and review of interim financial statements included in the Company's quarterly Form 10-QSB filings for 2002.

Other Fees

There were no fees billed during 2003 or 2002 by the Company's independent accountants for audit-related fees, tax fees or any other fees.

SIGNATURES

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

SONEX RESEARCH, INC.

April 14, 2004 By: /s/ Andrew A. Pouring  
-----  
Andrew A. Pouring  
Principal Executive Officer

April 14, 2004 By: /s/ George E. Ponticas  
-----  
George E. Ponticas  
Principal Financial and Accounting Officer

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

April 14, 2004 /s/ Andrew A. Pouring  
-----  
Andrew A. Pouring  
Vice Chairman of the Board of Directors

April 14, 2004 /s/ Roger D. Posey  
-----  
Roger D. Posey  
Director

April 14, 2004 /s/ Herbert J. Mitschele, Jr.  
-----  
Herbert J. Mitschele, Jr.  
Director

The Registrant will furnish its shareholders with copies of its annual report and proxy statement after the date of this report.

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Exhibit 10.2

## Employment Agreement

THIS EMPLOYMENT AGREEMENT is entered into as of February 23, 2004 by and between Sonex Research, Inc., a Maryland corporation (the "Company"), and Roger D. Posey, an individual (the "Executive").

WITNESSETH:

WHEREAS, the Company desires to employ the Executive, and the Executive desires to be employed by the Company, pursuant to the provisions contained in this Employment Agreement (the "Agreement");

NOW, THEREFORE, in consideration of the premises, and the respective covenants and agreements of each of the Company and the Executive contained in this Agreement, each of the Company and the Executive agrees as follows:

### ARTICLE I

#### Certain Definitions

The following terms shall have the following respective meanings when utilized in this Agreement:

"Agreement" means this Employment Agreement as it is now or hereafter in effect.

"Approved Board" means a Board of Directors of the Company that, as of a given date, is comprised of individuals at least a majority of whom have continuously served as directors of the Company during the period of two years ending on such date, unless the election of each director who was not a director at the beginning of such two year period was approved in advance by the directors representing at least two-thirds of the directors then in office who were directors at the beginning of such two year period.

"Approved Change in Control of the Company" means any transaction or series of transactions which:

- (a) results, or is reasonably anticipated to result, in a Change in Control of the Company;
- (b) is approved by the requisite vote of an Approved Board pursuant to, and in accordance with, applicable law and the Articles of Incorporation and Bylaws of the Company; and
- (c) if required by applicable law or the Articles of Incorporation or Bylaws of the Company, is approved by the requisite vote of the shareholders of the Company pursuant to, and in accordance with, applicable law and the Articles of Incorporation and Bylaws of the Company. "Bonus" means, as of a given date, the most recent annual performance bonus awarded by the Company to the Executive.

"Cause" means any action by the Executive or any inaction by the Executive which, after due consideration, is reasonably determined by the Board of Directors of the Company to constitute:

- (a) fraud, embezzlement, misappropriation, dishonesty or breach of trust;
- (b) a felony or moral turpitude;
- (c) material breach or violation of any or all of the covenants, agreements and obligations of the Executiveset forth in this Agreement, other than as the result of the Executive's death or Disability;
- (d) a willful or knowing failure or refusal by the Executive to perform any or all of his material duties and responsibilities as an officer of the Company, other than as the result of the Executive's death or

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- Disability; or
- (e) gross negligence by the Executive in the performance of any or all of his material duties and responsibilities as an officer of the Company, other than as a result of the Executive's death or Disability;

provided, however, that if the basis for any termination of the Executive's employment by the Company as set forth in the Termination Notice delivered by the Company to the Executive is any or all of the definitions of Cause set forth in paragraphs (c), (d) or (e) of this definition, then, in such event, the Executive shall have thirty (30) days from and after the date of his receipt of such Termination Notice to present a reasonable plan to cure such action or inaction specified in the Termination Notice, which plan may require more than thirty (30) days to cure the specified action or inaction, but such plan shall be reasonably satisfactory to the Company.

"Change in Control of the Company" means any change in control of the Company of a nature which would be required to be reported (a) in response to Item 6(e) of Schedule 14A of Regulation 14A, as in effect on the date of this Agreement, promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), (b) in response to Item 1 of the Current Report on Form 8-K, as in effect on the date of this Agreement, promulgated under the Exchange Act, or (c) in any filing by the Company with the United States Securities and Exchange Commission; provided, however, that, without limitation, a Change in Control of the Company shall be deemed to have occurred if:

(a) subsequent to the date of this Agreement, any "person" (as such term is defined in Sections 13(d)(3) and 14(d)(2) of the Exchange Act), other than the Company, any subsidiary of the Company or any compensation, retirement, pension or other employee benefit plan or trust of the Company or any subsidiary of the Company, becomes the "beneficial owner" (as such term is defined in Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of the Company or any successor to the Company (whether by merger, consolidation or otherwise) representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities;

(b) during any period of two consecutive years, the individuals who at the beginning of such period constitute the Board of Directors of the Company cease for any reason to constitute at least a majority of such Board of Directors, unless the election of each director who was not a director at the beginning of such period has been approved in advance by the directors representing at least two-thirds of the directors then in office who were directors at the beginning of such period;

(c) the Company shall merge or consolidate with or into another corporation or other entity, or enter into a binding agreement to merge or consolidate with or into another corporation or other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving corporation or entity) not less than eighty-five percent (85%) of the combined voting power of the voting securities of the Company or such surviving corporation or entity outstanding immediately after such merger or consolidation;

(d) the Company shall sell, lease, exchange or otherwise dispose of all or substantially all of its assets, or enter into a binding agreement for the sale, lease, exchange or other disposition of all or substantially all of its assets, in one transaction or in a series of related transactions; or

(e) the Company shall liquidate or dissolve, or any plan or proposal shall be adopted for the liquidation or dissolution of the Company.

"Company" means Sonex Research, Inc., a Maryland corporation.

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"Compensation" means the sum of the Executive's Salary and Bonus.

"Deferred Amount" means the aggregate amount of all payments by the Company to the Executive deferred pursuant to the provisions Sections 4.3 and 5.1 of this Agreement.

"Disability" means any mental or physical illness, condition, disability or incapacity which prevents the Executive from reasonably discharging his duties and responsibilities as an officer of the Company. If any disagreement or dispute shall arise between the Company and the Executive as to whether the Executive suffers from any Disability, then, in such event, the Executive shall submit to the physical or mental examination of a licensed physician, who is mutually agreeable to the Company and the Executive, and such physician shall determine whether the Executive suffers from any Disability. In the absence of fraud or bad faith, the determination of such physician shall be final and binding upon the Company and the Executive. The entire cost of such examination shall be paid for solely by the Company.

"Executive" means Roger D. Posey, an individual.

"Good Reason" means:

(a) the assignment by the Board of Directors of the Company to the Executive, without his express written consent, of duties and responsibilities which results in the Executive having less significant duties and responsibilities or exercising less significant power and authority than he had, or duties and responsibilities or power and authority not comparable to that of the level and nature which he had, immediately prior to such assignment;

(b) the removal of the Executive from, or a failure to reappoint the Executive to, his then current position with the Company or its subsidiaries or affiliates, except (i) with the Executive's express written consent or (ii) in connection with any termination of the Executive's employment by the Company as the result of the Executive's Protracted Disability or for Cause;

(c) the Company's failure to perform on a timely basis its obligations under this Agreement; (d) the Company's requiring the Executive, without his express written consent, to travel on Company business to an extent substantially greater than the Executive's business travel obligations immediately prior to such time;

(e) the Company's requiring the Executive, without his express written consent, to change his place of permanent residency; or

(f) the failure of the Company to obtain the express written assumption of, and agreement to perform on a timely basis, the Company's obligations under this Agreement by any successor to the Company as required by Article X of this Agreement. "Person" means any individual, person, firm, corporation, partnership, association or other entity. "Protracted Disability" means any Disability which prevents the Executive from reasonably discharging his duties and responsibilities as an officer of the Company for a period of six (6) consecutive months.

"Salary" means, as of a given date, the Executive's then current annual salary.

"Successor Agreement" shall have the meaning set forth in Article X of this Agreement.

"Termination Date" means a specific date not less than forty-five (45) nor more than ninety (90) days from and after the date of any Termination Notice upon which the Executive's employment by the Company shall be terminated in accordance with the provisions of this Agreement.

"Termination Notice" shall mean a written notice which sets forth (a) the specific provision of this Agreement relied upon to terminate the Executive's employment, (b) in reasonable detail the facts and circumstances claimed to provide the basis for the termination of the Executive's employment, and (c) a Termination Date.

"Territory" shall have the meaning set forth in Section 9.1(a) of this Agreement.

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## ARTICLE II

### Employment

The Company employs the Executive and the Executive accepts such employment. Subject to the direction of the Board of Directors, the Executive shall serve as the President of the Company and each of the existing subsidiary corporations and other entities currently affiliated with the Company. The Executive shall have such responsibilities, perform such duties and exercise such power and authority as are inherent in, or incident to, the office of President and shall report directly to the Board of Directors of the Company. The Executive shall devote substantially all of his business time and attention and his best efforts to the diligent performance of his duties as an employee of the Company.

## ARTICLE III

### Term

Subject to the provisions of Article VII below, the term of this Agreement shall be for the period commencing on the date of this Agreement and expiring on March 15, 2006.

## ARTICLE IV

### Salary

4.1 Salary. Beginning on March 15, 2004, the Company shall pay to the Executive a salary (subject to applicable payroll and/or other taxes required by law to be withheld) of One Hundred Forty Thousand Dollars (\$140,000.00) per annum. Compensation (salary) to the Executive for the period beginning as of the date of this Agreement through March 14, 2004 is addressed by the terms of the February 16, 2004 Letter Agreement between the Company and the Executive.

4.2 Payment of Salary. Payments of salary shall be made to the Executive in installments from time to time on the same dates payments of salary are generally made to all senior management employees of the Company.

4.3 Deferral of Salary. Notwithstanding anything contained in this Article IV, payment of Sixty-Eight Thousand Dollars (\$68,000.00) of the Executive's annual salary for each year of the term of this Agreement shall be deferred until March 15, 2006, unless payment shall become due on an earlier date as provided for herein or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow such payment in whole or in part..

## ARTICLE V

### Additional Compensation

5.1 Inducement Amount. The Company shall pay to the Executive the amount of Thirty-Three Thousand Dollars (\$33,000) upon his execution and delivery of this Agreement (the "Inducement Amount"). Eight Thousand Dollars (\$8,000) of the Inducement Amount shall be retained by the Company in accordance with the provisions of Section 6.4(a) below. Payment of Twenty-Five Thousand Dollars (\$25,000) of the Inducement Amount shall be deferred until February 22, 2006, unless payment shall become due on an earlier date as provided for herein or at such earlier date as the Board of Directors determines that the Company's cash flow is sufficient to allow such payment in whole or in part.

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5.2 Incentive Compensation. For each fiscal year of the Company, the Company shall pay to the Executive incentive compensation equal to one and one-half percent (1.5%) of the amount by which the revenues of the Company for such fiscal year exceed the revenues of the Company for the fiscal year ended December 31, 2003. For purposes of this Section 5.1, the term "revenues" shall mean revenues as determined in accordance with generally accepted accounting principles applied on a consistent basis with prior years. Such incentive compensation shall be paid to the Executive in cash not later than ninety days after the conclusion of the fiscal year of the Company.

5.3 Performance Bonus. The Executive may from time to time receive a performance bonus as shall be determined by the Board of Directors of the Company. For the fiscal year ending December 31, 2004, the Executive shall receive a performance bonus of not less than Ten Thousand Dollars (\$10,000).

### ARTICLE VI

#### Certain Fringe Benefits

6.1 Generally. The Executive shall be entitled to receive such benefits and to participate in such benefit plans as are generally provided from time to time by the Company to its senior management employees; provided, however, that nothing contained in this Section 6.1 shall be construed to obligate the Company to provide any specific benefits to its employees generally. As soon as the Company's financial situation allows, the Company shall obtain Directors and Officers Liability Insurance from a reputable carrier and life insurance with respect to the Executive with the beneficiary thereof to be named by the Executive.

6.2 Vacations. The Executive shall be entitled to vacation time on an annual basis in accordance with such policies as are from time to time adopted by the Company's Board of Directors with respect to its senior management employees.

6.3 Automobile. The Company shall provide the Executive a monthly cash allowance for use of his personal automobile by the Executive in connection with the performance of his duties under this Agreement. Such amount shall be mutually agreed by the Company and the Executive within thirty days of the execution of this Agreement. The Executive shall be entitled to receive reimbursement for such automobile expenses as are incurred by the Executive in connection with the performance of his duties under this Agreement in accordance with such policies as are from time to time adopted by the Board of Directors with respect to senior management employees.

#### 6.4 Stock.

(a) Simultaneously with the execution and delivery of this Agreement, for and in consideration of Eight Thousand Dollars (\$8,000.00), the Company is issuing to the Executive Eight Hundred Thousand (800,000) shares of its common stock, par value \$.01 per share (the "Common Stock"). The Company shall retain the first Eight Thousand Dollars (\$8,000.00) of the Inducement Amount in payment for such shares of Common Stock.

(b) Certificates representing Two Hundred Thousand (200,000) shares of the Common Stock described in Section 6.4(a) above shall be immediately delivered to the Executive. Certificates representing Six Hundred Thousand (600,000) shares of the Common Stock described in Section 6.4(a) above shall be held by Gary D. Lipson, Esquire. On the respective dates set forth below, regardless of whether the Executive is employed or not employed by the Company, Gary D. Lipson, Esquire shall deliver certificates representing the following numbers of shares of Common Stock to the Executive:

| Date              | Number of Shares |
|-------------------|------------------|
| May 31, 2004      | 200,000          |
| August 31, 2004   | 200,000          |
| November 30, 2004 | 200,000          |



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provided, however, that if Gary D. Lipson, Esquire shall receive written notice from the Company that the Executive has terminated his employment without Good Reason, then Gary D. Lipson, Esquire shall not deliver any of the certificates then in his possession to the Executive and shall return such certificates to the Company, and the Company shall pay to the Executive in cash the amount equal to \$.01 per share for each share that is returned to the Company. If there shall occur a Change in Control of the Company, other than an Approved Change in Control of the Company, while the Executive is employed by the Company, then Gary D. Lipson, Esquire shall immediately deliver all of the certificates in his possession to the Executive. Gary D. Lipson, Esquire may file an action in interpleader at any time and place the certificates into the registry of a court.

(c) On or after February 22, 2005, the Company shall issue to the Executive Two Hundred Thousand (200,000) shares of its Common Stock upon payment by the Executive to the Company of Two Thousand Dollars (\$2,000.00).

(d) The Executive represents and warrants to the Company, and covenants and agrees with the Company, as follows:

(i) The shares of Common Stock to be issued to the Executive pursuant to this Section 6.4 are being acquired by the Executive for his own account, and not for the account or beneficial interest of any other person or entity. The shares of Common Stock to be issued to the Executive pursuant to this Section 6.4(a) are not being acquired by the Executive with a view to, or for resale in connection with, any "distribution" within the meaning of the Securities Act of 1933 and the rules and regulations promulgated thereunder (collectively, the "Federal Securities Laws") or any applicable state securities or blue sky laws (collectively, the "State Securities Laws").

(ii) Except as otherwise provided in this Agreement, the shares of Common Stock to be issued to the Executive pursuant to this Section 6.4 have not been, and will not be, registered under the Federal Securities Laws or any State Securities Laws and, as such, must be held by the Executive unless and until they are subsequently so registered under the Federal Securities Laws and any applicable State Securities Laws or an exemption from registration thereunder is available. The shares of Common Stock to be issued to the Executive pursuant to this Section 6.4 constitute "restricted securities," as that term is defined in Rule 144 promulgated by the Securities and Exchange Commission under the Securities Act of 1933.

(iii) The Executive shall not sell, assign, transfer, convey, pledge, hypothecate, encumber or otherwise dispose of (collectively, a "Transfer") any or all of the shares of Common Stock to be issued to him pursuant to this Section 6.4, unless such Transfer is registered under the Federal Securities Laws and any applicable State Securities Laws or a specific exemption from registration thereunder is available. Any Transfer of any or all of the shares of Common Stock to be issued to the Executive pursuant to this Section 6.4 which is made pursuant to an exemption claimed under the Federal Securities Laws and any applicable State Securities Laws will require a favorable opinion of the Executive's legal counsel, in form and in substance satisfactory to the Company and its legal counsel, to the effect that such Transfer does not and will not violate the provisions of the Federal Securities Laws or any applicable State Securities Laws.

(iv) Except as otherwise provided in this Agreement, the Company is under no obligation whatsoever to file any registration statement under the Federal Securities Laws or any State Securities Laws to register any Transfer of any shares of Common Stock held by the Executive, or to take any other action necessary for the purpose of making an exemption from registration available to the Executive in connection with any such Transfer. Stop transfer instructions will be

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issued by the Company with respect to the shares of Common Stock to be issued to the Executive pursuant to this Section 6.4.

(v) There will be placed upon all of the certificates representing shares of Common Stock delivered by the Company to the Executive, and any and all certificates delivered in partial or total substitution therefore, a restrictive legend which will read substantially as follows:

THE SHARES REPRESENTED BY THIS CERTIFICATE MAY NOT BE SOLD, ASSIGNED, TRANSFERRED, CONVEYED, PLEDGED, HYPOTHECATED, ENCUMBERED OR OTHERWISE DISPOSED OF UNLESS (A) THEY ARE COVERED BY A REGISTRATION STATEMENT OR POST-EFFECTIVE AMENDMENT THERETO, EFFECTIVE UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) SUCH SALE, ASSIGNMENT, TRANSFER, CONVEYANCE, PLEDGE, HYPOTHECATION, ENCUMBRANCE OR OTHER DISPOSITION IS EXEMPT FROM THE PROVISIONS OF SECTION 5 OF THAT ACT.

(e) At any time and from time to time, promptly upon request by the Executive, the Company shall cause a registration statement to be filed with the SEC regarding some or all of the shares of Common Stock issued or to be issued to the Executive pursuant to this Section 6.4.

### 6.5 Stock Options.

(a) The Executive shall be entitled to participate in the Company's stock option plans as may from time to time be in effect, including without limitation the Company's 1987 Non-Qualified Stock Option Plan, as amended, and to receive such incentive or other stock options as may from time to time be granted to him thereunder; provided, however, that nothing contained in this Section 6.5(a) shall be construed to obligate the Company, its Board of Directors or any committee of its Board of Directors to grant any incentive or other stock option whatsoever to the Executive.

(b) Simultaneously with the execution and delivery of this Agreement, the Company and the Executive are entering into a Stock Option Agreement pursuant to which, among other things, the Company is granting to the Executive options to purchase Five Hundred Thousand (500,000) shares of common stock of the Company on the terms and subject to the conditions set forth therein.

6.6 Business, Travel and Entertainment Expenses. Within a reasonable time after the submission of appropriate receipts and other evidence by the Executive, the Company shall pay, or reimburse the Executive for, all reasonable business, travel and entertainment expenses incurred by the Executive in connection with the performance of his duties and responsibilities on behalf of the Company.

## ARTICLE VII

### Termination of Employment

#### 7.1 Termination of Employment.

(a) Notwithstanding the provisions of Article III hereof, this Agreement (i) shall automatically terminate upon the death of the Executive pursuant to the provisions of Section 7.2 hereof, (ii) may be terminated at any time by the Company pursuant to the provisions of Sections 7.3 or 7.4 hereof, and (iii) may be terminated at any time by the Executive pursuant to the provisions of Section 7.5 hereof.

(b) If either the Company or the Executive shall desire to terminate the Executive's employment by the Company pursuant to any of the provisions of Sections 7.3, 7.4, or 7.5 of this Agreement, then, in such event, the party causing such termination shall provide a Termination Notice to the other party.

(c) If this Agreement shall be terminated pursuant to any of the provisions of this Article VII, the Company shall be discharged from all of its obligations to the Executive under this Agreement upon the payment to the Executive of the amount set forth in the Section of this Article VII pursuant to

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which such termination shall occur. The Executive's sole and exclusive remedy for the termination of this Agreement prior to March 15, 2006, regardless of whether such termination shall be initiated by the Company or the Executive, and regardless of whether such termination shall be with or without Cause, shall be the payment by the Company to the Executive of the amount set forth in the Section of this Article VII pursuant to which such termination shall occur.

7.2 Death of Executive. If during the term of this Agreement the Executive shall die, then the employment of the Executive by the Company shall automatically terminate on the date of the Executive's death. In such event, not more than thirty (30) days after the date of the Executive's death, the Company shall pay to the Executive's estate or as otherwise directed by the Executive's personal representative or executor, an amount in cash equal to the sum of (a) the Deferred Amount accrued through the end of the calendar month of the date of the Executive's death and (b) the Executive's Compensation (subject to applicable payroll and/or other taxes required by law to be withheld) determined as of the date of the Executive's death.

### 7.3 Disability of Executive.

(a) In the event that at any time during the term of this Agreement the Executive shall suffer any Disability, then the Company shall be obligated to continue to pay in the ordinary and normal course of its business to the Executive or his legal representative, as the case may be, the Executive's Compensation (subject to applicable payroll and/or other taxes required by law to be withheld) from the date that the Executive shall first suffer any such Disability to the date that the Executive's employment by the Company shall be terminated pursuant to any of the provisions of this Agreement.

(b) In the event that the Executive shall suffer any Protracted Disability during the term of this Agreement, then the Company may terminate the Executive's employment under this Agreement. In such event, in addition to any other benefits which may have been provided by the Company to the Executive or his legal representative, as the case may be, pursuant to the provisions of Section 7.3(a) above, not later than the Termination Date specified in the Termination Notice delivered by the Company to the Executive or his legal representative, as the case may be, the Company shall pay to the Executive or as otherwise directed by the Executive's legal representative an amount in cash equal to the sum of (i) the Deferred Amount accrued through the end of the calendar month of the date of the termination of the Executive's employment and (ii) the Executive's Compensation (subject to applicable payroll and/or taxes required by law to be withheld) determined as of the date of such Termination Notice. Subsequent to such Termination Date, the Executive or his legal representative, as the case may be, shall also be entitled to receive any benefits which may be payable under any disability insurance policy or disability plan provided to the Executive by the Company.

### 7.4 Termination of Employment by Company.

(a) The Company may terminate this Agreement at any time with Cause. In such event, the Company shall be obligated to continue to pay in the ordinary and normal course of its business to the Executive only his Salary (subject to applicable payroll and/or other taxes required by law to be withheld) through the Termination Date set forth in the Termination Notice and, on such date of termination, the Company shall pay to the Executive the Deferred Amount accrued through the date of termination of the Executive's employment.

(b) The Company may terminate this Agreement at any time without Cause. In such event, (i) not later than the Termination Date specified in the Termination Notice, the Company shall pay to the Executive an amount in cash equal to the sum of (A) the Deferred Amount and (B) the Executive's Compensation (subject to applicable payroll and/or other taxes required by law to be withheld) determined as of the date of such Termination Notice through the remaining term of the Agreement and (ii) the restrictions set forth in Section 9.1(b) hereof shall not be applicable to the Executive.

### 7.5 Termination of Employment by Executive.

(a) The Executive may terminate this Agreement at any time with Good Reason. In such event, (i) not later than the Termination Date specified in the Termination Notice, the Company shall pay to the Executive an

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amount in cash equal to the sum of (A) the Deferred Amount and (B) the Executive's Compensation (subject to applicable payroll and/or other taxes required by law to be withheld) determined as of the date of such Termination Notice through the remaining term of the Agreement and (ii) the restrictions set forth in Section 9.1(b) hereof shall not be applicable to the Executive.

(b) The Executive may terminate this Agreement at any time without Good Reason. In such event, the Company shall be obligated to continue to pay in the ordinary and normal course of its business to the Executive only his Salary (subject to applicable payroll and/or other taxes required by law to be withheld) through the Termination Date set forth in the Termination Notice and, on such date of termination, the Company shall pay to the Executive the Deferred Amount accrued through the date of termination of the Executive's employment.

### ARTICLE VIII

#### Termination of Employment Subsequent to a Change in Control of the Company

8.1 Termination of Employment. Notwithstanding the provisions of Articles III and VII of this Agreement, in the event that (a) there shall occur any Change in Control of the Company, other than an Approved Change in Control of the Company, and (b) at any time subsequent to the date of any such Change in Control of the Company, either (i) the Company shall terminate the employment of the Executive for any reason, other than as the result of the death or the Protracted Disability of the Executive or for Cause, or (ii) the Executive shall terminate his employment for Good Reason, then, in any such event, (A) not later than the Termination Date specified in the Termination Notice delivered by the Company to the Executive, or by the Executive to the Company, as the case may be, the Company shall pay to the Executive an amount in cash equal to the Executive's Compensation, determined as of the date of such Termination Notice, multiplied by three (subject to applicable payroll and/or other taxes required by law to be withheld), (B) the restrictions set forth in Section 9.1(b) hereof shall not be applicable to the Executive, and (C) any and all stock options granted to the Executive under any stock option plan of the Company or otherwise as may from time to time be in effect, which shall not by their terms have vested on or before such Termination Date, shall vest on such Termination Date.

8.2 Limitation on Payment. Notwithstanding anything to the contrary set forth in Section 8.1 above, the amount paid by the Company to the Executive shall be limited to the maximum amount which will not constitute a "parachute payment," as such term is defined in Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended. This limitation shall first be applied to amounts provided pursuant to clause (C) of Section 8.1 hereof (otherwise included in the calculation of a parachute payment) to the extent thereof and then to amounts provided pursuant to clause (A) of Section 8.1 hereof.

### ARTICLE IX

#### Certain Restrictions on the Executive

9.1 Certain Restrictions. The Executive covenants and agrees with the Company as follows: (a) He shall not at any time, directly or indirectly, for himself or any other Person which competes in any manner with the Company or any of its subsidiaries or affiliates in the United States of America or its territories and possessions or any other countries in which the Company as of the date of termination of this Agreement conducts its business directly or indirectly through any of its subsidiaries or affiliates (collectively, the "Territory"), employ, attempt to employ or enter into any contractual arrangement for employment with, any employee or former

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employee of the Company or any of its subsidiaries or affiliates, unless such former employee shall not have been employed by the Company or any of its subsidiaries or affiliates for a period of at least one year.

(b) He shall not, during the term of this Agreement and for a period of two years from and after the date of termination of this Agreement, directly or indirectly, (i) acquire or own in any manner any interest in, or loan any amount to, any Person which competes with the Company or any of its subsidiaries or affiliates in the combustion process of reciprocating engines of all kinds and rotary engines (the "Business") in the Territory, (ii) be employed by or serve as an employee, agent, officer, or director of, or as a consultant to, any Person, other than the Company and its subsidiaries and affiliates, which competes with the Company or its subsidiaries or affiliates in the Business in the Territory, or (iii) compete with the Company or its subsidiaries or affiliates in the Business in the Territory. The foregoing provisions of this Section 9.1(b) shall not prevent the Executive from acquiring and owning not more than five percent (5%) of the equity securities of any Person whose securities are listed for trading on a national securities exchange or are regularly traded in the over-the-counter securities market.

(c) In the course of the Executive's employment by the Company, the Executive will have access to confidential or proprietary information of the Company and its subsidiaries and affiliates. The Executive shall not at any time divulge or communicate to any Person, or use to the detriment of the Company or its subsidiaries or affiliates, any such confidential or proprietary information. The term "confidential or proprietary information" shall mean information not generally available to the public, including without limitation personnel information, financial information, customer lists, supplier lists, marketing plans and analyses, trade secrets, computer software and source and object codes and procedures and techniques of operating and managing the business of the Company and its subsidiaries and affiliates.

9.2 Remedies. It is recognized and acknowledged by each of the Company and the Executive that a breach or violation by the Executive of any or all of his covenants and agreements contained in Section 9.1 of this Agreement will cause irreparable harm and damage to the Company and its subsidiaries and affiliates in a monetary amount which would be virtually impossible to ascertain and, therefore, will deprive the Company of an adequate remedy at law. Accordingly, if the Executive shall breach or violate any or all of his covenants and agreements set forth in Section 9.1 hereof, then the Company and its subsidiaries and affiliates shall have resort to all equitable remedies, including without limitation the remedies of specific performance and injunction, both permanent and temporary, as well as all other remedies which may be available at law.

9.3 Intent. It is the intent of the parties that the restrictions set forth in Section 9.1 hereof shall be enforced to the fullest extent permissible under the laws and public policies of each jurisdiction in which enforcement of such restrictions may be sought. If any provision contained in Section 9.1 hereof shall be adjudicated by a court of competent jurisdiction to be invalid or unenforceable because of its duration or geographic scope, then such provision shall be reduced by such court in duration or geographic scope or both to such extent as to make it valid and enforceable in the jurisdiction where such court is located, and in all other respects shall remain in full force and effect.

### ARTICLE X

#### Successor to the Company

The Company shall require any successor, whether direct or indirect, and whether by purchase, merger, consolidation or otherwise, to all or substantially all of the business or properties and assets of the Company, to execute and deliver to the Executive, not later than the date of the

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consummation of any such purchase, merger, consolidation or other transaction, a written instrument in form and in substance reasonably satisfactory to the Executive and his legal counsel pursuant to which any such successor shall agree to assume and to perform on a timely basis or to cause to be performed on a timely basis all of the Company's covenants, agreements and obligations set forth in this Agreement (a "Successor Agreement"). The failure of the Company to cause any such successor to execute and deliver a Successor Agreement to the Executive shall (a) constitute a breach of the provisions of this Agreement by the Company and (b) be deemed to constitute a termination by the Executive of his employment hereunder (as of the date upon which any such successor shall succeed to all or substantially all of the business or properties and assets of the Company) for Good Reason.

### ARTICLE XI

#### Attorneys' Fees

In the event that any litigation shall arise between the Company and the Executive based, in whole or in part, upon this Agreement or any or all of the provisions contained herein, then, in any such event, the prevailing party in any such litigation shall be entitled to recover from the non-prevailing party, and shall be awarded by a court of competent jurisdiction, any and all reasonable fees and disbursements of trial and appellate counsel paid, incurred or suffered by such prevailing party as the result of, arising from, or in connection with, any such litigation.

### ARTICLE XII

#### Miscellaneous Provisions

12.1 Governing Law. This Agreement shall be governed by, and shall be construed and interpreted in accordance, with the laws of the State of Maryland.

12.2 Notices. Any and all notices and other communications required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been duly given when delivered by hand, or when delivered by mail, by registered or certified mail, postage prepaid, return receipt requested, to the respective parties at the following respective addresses: If to the Company: Sonex Research, Inc. 23 Hudson Street Annapolis, Maryland 21401 Attention: Chief Executive Officer If to the Executive: Roger D. Posey 6204 Long Meadow Drive Sykesville, Maryland 21784 or to such other address as either party may from time to time give written notice of to the other in accordance with the provisions of this Section 12.2.

12.3 Entire Agreement. This Agreement constitutes the entire agreement between the Company and the Executive with respect to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and arrangements, both oral and written, between the Company and the Executive with respect to such subject matter.

12.4 Amendments. This Agreement may not be amended or modified in any manner, except by a written instrument executed by each of the Company and the Executive.

12.5 Benefits; Binding Effect. This Agreement shall be for the benefit of, and shall be binding upon, each of the Company and the Executive and their respective heirs, personal representatives, executors, legal representatives, successors and assigns.

12.6 Severability. The invalidity of any one or more of the words, phrases, sentences, clauses or sections contained in this Agreement shall not affect the enforceability of the remaining portions of this Agreement or any part hereof, all of which are inserted conditionally on their being valid in law. Except as

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otherwise provided in Section 9.3 above, if any one or more of the words, phrases, sentences, clauses or sections contained in this Agreement shall be declared invalid by any court of competent jurisdiction, then, in any such event, this Agreement shall be construed as if such invalid word or words, phrase or phrases, sentence or sentences, clause or clauses, or section or sections had not been inserted.

12.7 No Waivers. The waiver by either party of a breach or violation of any provision of this Agreement by any other party shall not operate nor be construed as a waiver of any subsequent breach or violation. The waiver by either party to exercise any right or remedy it or he may possess shall not operate nor be construed as a bar to the exercise of such right or remedy by such party upon the occurrence of any subsequent breach or violation.

12.8 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of any or all of the provisions hereof. 12.9 Counterparts. This Agreement may be executed in any number of counterparts and by the separate parties in separate counterparts, each of which shall be deemed to constitute an original and all of which shall be deemed to constitute the one and the same instrument.

IN WITNESS WHEREOF, each of the parties has executed and delivered this Agreement as of the date first written above.

Sonex Research, Inc.

By \_\_\_\_\_  
Andrew A. Pouring,  
Chief Executive Officer

\_\_\_\_\_  
Roger D. Posey

Exhibit 10.2

Stock Option Agreement

THIS STOCK OPTION AGREEMENT is entered into as of February 23, 2004 by and between Sonex Research, Inc., a Maryland corporation (the "Company"), and Roger D. Posey, an individual (the "Executive").

RECITALS:

- A. The Company desires to employ the Executive.
- B. In order to induce the Executive to be employed by the Company, the Company desires to grant to the Executive certain options to purchase shares of the Company's common stock, par value \$.01 per share (the "Common Stock").
- C. Each of the Company and the Executive desires to enter into this Stock Option Agreement (the "Agreement") for the purpose of evidencing the grant of such options and setting forth certain of the terms and conditions governing the exercise thereof.

NOW, THEREFORE, in consideration of the premises, and the respective covenants and agreements of the parties set forth herein, each of the Company and the Executive agrees as follows:

ARTICLE I

Stock Options

1.1 Grant of Options. Subject to the terms and conditions set forth in this

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Agreement, for and in consideration of Ten Dollars (\$10) and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by the Company, the Company grants to the Executive options to purchase an aggregate of Five Hundred Thousand (500,000) shares of Common Stock (collectively, the "Options").

1.2 Date of Grant. The date of grant of the Options is February 23, 2004 (the "Grant Date").

1.3 Maximum Term of Options. In no event may the Options be exercised, in whole or in part, after February 22, 2014.

1.4 Vesting, Exercisability and Exercise Price of Options. The Options shall vest and be exercisable on and after the dates set forth below as to the number of shares of Common Stock set forth below at the respective exercise price per share of Common Stock set forth below:

| Date Becoming Exercisable           | Number<br>of shares | Exercise Price<br>Per Share |
|-------------------------------------|---------------------|-----------------------------|
| Grant Date                          | 100,000             | \$0.25                      |
| Six months after Grant Date         | 100,000             | \$0.50                      |
| Twelve months after Grant Date      | 100,000             | \$1.00                      |
| Eighteen months after Grant Date    | 100,000             | \$1.50                      |
| Twenty-four months after Grant Date | 100,000             | \$2.00                      |

The vesting of the Options and the Executive's right to exercise the Options shall be cumulative.

### 1.5 Exercise and Payment.

(a) Subject to the provisions of Section 1.4 above, the Options may be exercised, in whole or in part, by delivery of written notice to the Company indicating the number of Options which are being exercised by the Executive, accompanied by payment of the full amount of the "Aggregate Exercise Price" (as such term is hereinafter defined).

(b) For purposes of this Section 1.5, the term "Aggregate Exercise Price" shall mean the appropriate exercise price per share set forth in the Vesting and Exercise Schedule above multiplied by the number of Options being exercised by the Executive.

(c) The Aggregate Exercise Price shall be paid by the Executive to the Company by the delivery of (i) cash, (ii) certified or cashiers' check, (iii) shares of Common Stock already owned by the Executive, (iv) the withholding of shares of Common Stock issuable upon such exercise of the Options, (v) irrevocable instructions to a broker to deliver promptly to the Company the amount of sale or loan proceeds required to pay the purchase price, or (vi) any combination of the foregoing methods of payment. Shares of Common Stock delivered in payment of all or any part of the amounts payable in connection with the exercise of Options, and shares of Common Stock withheld for such payment, shall be valued for such purpose at their "Fair Market Value" (as such term is hereinafter defined) as of the date of exercise of the Options.

(d) "Fair Market Value" of a share of Common Stock on any day means the last sale price (or, if no last sale price is reported, the average of the high bid and low asked prices) for a share of Common Stock on such day (or, if such day is not a trading day, on the next preceding trading day) as reported on NASDAQ or, if not reported on NASDAQ, as quoted by the National Quotation Bureau Incorporated, or if the Common Stock is listed on an exchange, on the principal exchange on which the Common Stock is listed. If for any day the Fair Market Value of a share of Common Stock is not determinable by any of the foregoing means, then the Fair Market Value for such day shall be determined in good faith by the Company on the basis of such quotations and other considerations as the Company deems appropriate.



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1.6 Limitations on Exercise and Assignment. During the Executive's lifetime, the Options granted pursuant to this Agreement shall be exercisable only by the Executive, and the Options shall not be transferable except, in case of the death of the Executive, by will or by the laws of descent and distribution. The Options granted pursuant to this Agreement shall not be subject to attachment, execution or other similar legal process. In the event of (a) any attempt by the Executive to alienate, assign, pledge, hypothecate or otherwise dispose of the Options, except as provided herein, or (b) the levy of any attachment, execution or similar legal process upon the rights or interest granted to the Executive pursuant to this Agreement, the Company, at its option, may terminate the Options by the delivery of written notice to the Executive and the Options shall thereupon become null and void.

1.7 No Rights of Shareholder. Neither the Executive nor any other person shall be, or shall have any of the rights and privileges of, a shareholder of the Company with respect to any shares of Common Stock purchasable or issuable upon the exercise of the Options, in whole or in part, prior to the date of exercise of the Options and payment in full of the Aggregate Exercise Price therefor.

1.8 Stock Adjustment. If there is any change in the number of issued and outstanding shares of Common Stock by reason of any stock split, stock dividend, recapitalization or other similar transaction, then the number of shares of Common Stock subject to the Options and the Exercise Price shall be proportionately adjusted.

1.9 Stock Reserved. The Company shall at all times during the term of this Agreement reserve and keep available such number of shares of its authorized but unissued Common Stock, or its Common Stock held as treasury stock, as shall be sufficient to satisfy the terms of this Agreement.

1.10 Corporate Reorganization. If there shall be any capital reorganization or consolidation or merger of the Company with another corporation or corporations or entity or entities, or any sale of all or substantially all of the Company's properties and assets to any other corporation or corporations or entity or entities, then, in any such event, the Company shall take such action as may be necessary to enable the Executive to receive upon any subsequent exercise of the Options, in whole or in part, including any shares under the Options for which the right to exercise has not accrued pursuant to the provisions of Section 1.4 above, in lieu of shares of Common Stock, securities or other assets as were issuable or payable upon such reorganization, consolidation, merger or sale in respect of, or in exchange for, such shares of Common Stock.

1.11 Intent.

(a) The Options granted to the Executive hereunder shall not constitute "incentive stock options" under the Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder.

(b) The Options granted to the Executive hereunder are not being granted pursuant to the Company's 1987 Non-Qualified Stock Option Plan.

## ARTICLE II

### Termination of Employment

2.1 Death; Protracted Disability. If the Executive's employment by the Company shall be terminated by reason of the Executive's death or Protracted Disability, then all of the Options granted to the Executive pursuant to this Agreement which have not previously vested pursuant to the provisions of section 1.4 shall vest on the date of death or the date of the Executive's termination of employment by reason of Protracted Disability, as the case may be, and may be exercised by the Executive or his estate, personal representative, executor, administrator, legal representative or any person who acquired such Options by will or by the laws of descent and distribution or by law, as the case may be, at any time prior to the earlier of (a) the expiration date of such Options set forth in this Agreement or (b) two years after the date of termination of employment.

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2.2 Cause. If the Executive's employment by the Company shall be terminated by the Company for Cause or by the Executive without Good Reason, then:

(a) all of the Options granted to the Executive pursuant to this Agreement which shall not have vested shall terminate on the date of termination of employment; and

(b) all of the Options granted to the Executive pursuant to this Agreement which shall have vested but which shall not have been previously exercised by the Executive shall terminate on the date of termination of employment.

2.3 Other Termination. If the Executive's employment by the Company shall be terminated for any reason other than one set forth in Section 2.1 or Section 2.2 above, then:

(a) all of the Options granted to the Executive pursuant to this Agreement which shall not have previously vested shall vest on the date of termination of employment; and

(b) all of the Options granted to the Executive pursuant to this Agreement which shall have previously vested pursuant to Section 1.4 but which shall not have been previously exercised by the Executive may be exercised by the Executive at any time prior to the earlier of (i) the expiration date of such Options set forth in this Agreement or (ii) one year from and after the date of termination of employment.

2.4 Certain Defined Terms. The terms "Protracted Disability," "Cause" and "Good Reason" shall have the respective meanings assigned to them in that certain Employment Agreement of even date herewith by and between the Company and the Executive.

### ARTICLE III

#### Delivery of Certificates

As soon as practicable following any exercise by the Executive of the Options, the Company shall deliver or cause to be delivered to the Executive a certificate or certificates representing the shares of Common Stock acquired pursuant to any such exercise; provided, however, that the Company may postpone the time of delivery of any certificate for such period of time as the Company shall deem necessary or desirable in order to enable it to comply with (i) the listing requirements of any securities exchange or the National Association of Securities Dealers, Inc. Automated Quotation system, (ii) the requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "Federal Securities Laws"), or (iii) the requirements of any applicable state securities or blue sky laws and the rules and regulations promulgated thereunder (collectively, the "State Securities Laws").

### ARTICLE IV

#### Certain Representations, Warranties, Covenants and Agreements of the Executive

The Executive represents and warrants to the Company, and covenants and agrees with the Company, as follows:

(a) The shares of Common Stock to be issued to the Executive upon any exercise of the Options are being acquired by the Executive for his own account, and not for the account or beneficial interest of any other person or entity. The shares of Common Stock to be issued to the Executive upon any exercise of the Options are not being acquired by the Executive with a view to, or for resale in connection with, any "distribution" within the meaning of the Federal Securities Laws or any applicable State Securities Laws.

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(b) The shares of Common Stock to be issued to the Executive upon any exercise of the Options have not been, and will not be, registered under the Federal Securities Laws or any State Securities Laws and, as such, must be held by the Executive unless and until they are subsequently so registered under the Federal Securities Laws and any applicable State Securities Laws or an exemption from registration thereunder is available. The shares of Common Stock to be issued to the Executive upon any exercise of the Options constitute "restricted securities," as that term is defined in Rule 144 promulgated by the Securities and Exchange Commission under the Securities Act.

(c) The Executive shall not sell, assign, transfer, convey, pledge, hypothecate, encumber or otherwise dispose of (collectively, a "Transfer") any or all of the shares of Common Stock to be issued to him upon any exercise of the Options, unless such Transfer is registered under the Federal Securities Laws and any applicable State Securities Laws or a specific exemption from registration thereunder is available. Any Transfer of any or all of the shares of Common Stock to be issued to the Executive upon any exercise of the Options which is made pursuant to an exemption claimed under the Federal Securities Laws and any applicable State Securities Laws will require a favorable opinion of the Executive's legal counsel, in form and in substance satisfactory to the Company and its legal counsel, to the effect that such Transfer does not and will not violate the provisions of the Federal Securities Laws or any applicable State Securities Laws.

(d) The Company is under no obligation whatsoever to file any registration statement under the Federal Securities Laws or any State Securities Laws to register any Transfer of any shares of Common Stock held by the Executive, or to take any other action necessary for the purpose of making an exemption from registration available to the Executive in connection with any such Transfer. Stop transfer instructions will be issued by the Company with respect to the shares of Common Stock to be issued to the Executive upon any exercise of the Options.

(e) There will be placed upon all of the certificates representing shares of Common Stock delivered by the Company to the Executive, and any and all certificates delivered in partial or total substitution therefor, a restrictive legend which will read substantially as follows:

THE SHARES REPRESENTED BY THIS CERTIFICATE MAY NOT BE SOLD, ASSIGNED, TRANSFERRED, CONVEYED, PLEDGED, HYPOTHECATED, ENCUMBERED OR OTHERWISE DISPOSED OF UNLESS (A) THEY ARE COVERED BY A REGISTRATION STATEMENT OR POST-EFFECTIVE AMENDMENT THERETO, EFFECTIVE UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) SUCH SALE, ASSIGNMENT, TRANSFER, CONVEYANCE, PLEDGE, HYPOTHECATION, ENCUMBRANCE OR OTHER DISPOSITION IS EXEMPT FROM THE PROVISIONS OF SECTION 5 OF THAT ACT.

### ARTICLE V

#### Registration of Shares

At any time and from time to time, promptly upon request by the Executive, the Company shall cause a registration statement to be filed with the SEC regarding some or all of the shares of Common Stock issued or to be issued to the Executive upon exercise of some or all of the Options.

### ARTICLE VI

#### Miscellaneous Provisions

6.1 Governing Law. This Agreement shall be governed by, and shall be construed and interpreted in accordance, with the laws of the State of Maryland.

6.2 Notices. Any and all notices and other communications required or

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permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been duly given when delivered by hand, or when delivered by mail, by registered or certified mail, postage prepaid, return receipt requested, to the respective parties at the following respective addresses: If to the Company: Sonex Research, Inc.

23 Hudson Street  
Annapolis, Maryland 21401  
Attention: Chief Executive Officer  
Roger D. Posey  
6204 Long Meadow Drive  
Sykesville, Maryland 21784

If to the Executive:

or to such other address as either party may from time to time give written notice of to the other in accordance with the provisions of this Section 6.2.

6.3 Entire Agreement. This Agreement constitutes the entire agreement between the Company and the Executive with respect to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and arrangements, both oral and written, between the Company and the Executive with respect to such subject matter.

6.4 Amendments. This Agreement may not be amended or modified in any manner, except by a written instrument executed by each of the Company and the Executive.

6.5 Benefits; Binding Effect. This Agreement shall be for the benefit of, and shall be binding upon, each of the Company and the Executive and their respective heirs, personal representatives, executors, legal representatives, successors and assigns.

6.6 Severability. The invalidity of any one or more of the words, phrases, sentences, clauses or sections contained in this Agreement shall not affect the enforceability of the remaining portions of this Agreement or any part hereof, all of which are inserted conditionally on their being valid in law. If any one or more of the words, phrases, sentences, clauses or sections contained in this Agreement shall be declared invalid by any court of competent jurisdiction, then, in any such event, this Agreement shall be construed as if such invalid word or words, phrase or phrases, sentence or sentences, clause or clauses, or section or sections had not been inserted.

6.7 No Waivers. The waiver by either party of a breach or violation of any provision of this Agreement by any other party shall not operate nor be construed as a waiver of any subsequent breach or violation. The waiver by either party to exercise any right or remedy it or he may possess shall not operate nor be construed as a bar to the exercise of such right or remedy by such party upon the occurrence of any subsequent breach or violation.

6.8 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of any or all of the provisions hereof.

6.9 Counterparts. This Agreement may be executed in any number of counterparts and by the separate parties in separate counterparts, each of which shall be deemed to constitute an original and all of which shall be deemed to constitute the one and the same instrument.

IN WITNESS WHEREOF, each of the parties has executed and delivered this Agreement as of the date first written above.

Sonex Research, Inc.

By \_\_\_\_\_  
Andrew A. Pouring,  
Chief Executive Officer

\_\_\_\_\_  
Roger D. Posey

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### CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Prospectus constituting part of the Registration Statement on Form S-8 (No. 33-34520) of Sonex Research, Inc. of our report dated April 2, 2004 appearing in this Form 10-KSB.

HAUSSER + TAYLOR LLC

Cleveland, Ohio  
April 12, 2004

EXHIBIT 23.b

### CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Prospectus constituting part of the Registration Statement on Form S-8 (No. 33-34520) of Sonex Research, Inc. of our report dated April 10, 2002 appearing in this Form 10-KSB.

C.L. STEWART & COMPANY

Annapolis, Maryland  
April 14, 2004

EXHIBIT 24

### APPOINTMENT OF ATTORNEY-IN FACT

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned Directors and Executive Officers of Sonex Research, Inc., a Maryland corporation that is subject to certain filing requirements with the Securities and Exchange Commission (SEC) and other regulatory agencies and governmental bodies, including but not limited to the Annual Report on Form 10-KSB and Registration Statements on Forms S-3 and S-8, hereby constitutes and appoints George E. Ponticas his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all reports and registration statements filed with the SEC and other regulatory agencies and governmental bodies, including amendments thereto and all other documents in connection therewith, granting unto said attorney-in-fact and agent full power and authority to do so and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

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| NAME   | POSITION  | DATE                    |
|--|---|-------------------------|
| /s/ Andrew A. Pouring<br>-----<br>Andrew A. Pouring                | Vice Chairman of the<br>Board of Directors & Chief<br>Executive Officer | -----<br>April 12, 2004 |
| /s/ Roger D. Posey<br>-----<br>Roger D. Posey                      | President and Director  | -----<br>April 12, 2004 |
| /s/ Herbert J. Mitshele, Jr.<br>-----<br>Herbert J. Mitschele, Jr. | Director  | -----<br>April 12, 2004 |

Exhibit 31.1

Certification of Chief Executive Officer Pursuant to  
Securities Exchange Act Rules 13a-14(a) or 15d-14(a) as Adopted  
Pursuant to Section 302 of the Sarbanes-Oxley Act Of 2002

I, Andrew A. Pouring, Chief Executive Officer, certify that:

1. I have reviewed this Annual Report on Form 10-KSB of Sonex Research, Inc. (the "Company"), a small business issuer, for the year ending December 31, 2003.
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this annual report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted financial principles;

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- c) Evaluated the effectiveness of the Company 's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent (fourth) fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company 's auditors and the audit committee of Company 's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company 's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Dated: April 14, 2004

/s/ Andrew A. Pouring  
Andrew A. Pouring  
Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer Pursuant to  
Securities Exchange Act Rules 13a-14(a) or 15d-14(a) as Adopted  
Pursuant to Section 302 of the Sarbanes-Oxley Act Of 2002

I, George E. Ponticas, Chief Financial Officer, certify that:

- 1. I have reviewed this Annual Report on Form 10-KSB of Sonex Research, Inc. (the "Company"), a small business issuer, for the year ending December 31, 2003.
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this annual report;
- 4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period

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- in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted financial principles;
  - c) Evaluated the effectiveness of the Company 's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent (fourth) fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company 's auditors and the audit committee of Company 's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company 's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Dated: April 14, 2004

/s/ George E. Ponticas  
George E. Ponticas  
Chief Financial Officer

Exhibit 32.1

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

In connection with the Annual Report of Sonex Research, Inc. (the "Company") on Form 10-KSB for the year ending December 31, 2003, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned certify, pursuant to and for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

SONEX RESEARCH, INC.



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/s/ Andrew A. Pouring  
Andrew A. Pouring  
Chief Executive Officer

/s/ George E. Ponticas  
George E. Ponticas  
Chief Financial Officer

April 14, 2004