SONEX RESEARCH INC
Form 10KSB
April 14, 2003

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, 2002.
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 each class	Name of each exchange on 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, 2002 were $471,912.

The number of shares outstanding of the Issuer's $.01 par value Common Stock as of March 31, 2003 was 21,592,669. The aggregate market value of voting stock held by non-affiliates of the Registrant was $3,318,824 as of March 31, 2003.

Documents Incorporated by Reference: None.

PART I

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 BurnTM 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

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 (EGR) 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, and has recently begun investigating the synergy of SCS technology with rotary engines. 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 small HFEs to military and commercial markets.

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 January 2003 the Company engaged the Annapolis, Maryland consulting group Paradigm Technologies, LLC ("Paradigm") to assess the Company's technologies and business model and suggest approaches for strategic alliances and additional market introductions for both commercial and military applications. Presently, Company management and Paradigm are pursuing a number of initiatives. One of the first goals is to secure cooperation with one or more companies which have technologies complementary to the Sonex processes. Additionally, Paradigm will also seek additional funding for Sonex to conduct technology development work necessary for addressing commercialization issues.

As of March 31, 2003, the Company has seven full-time employees and one part-time employee, 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.

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
- |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 in excess of $22 million, and may continue to incur quarterly 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 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, however, revenues increased substantially, providing cash to fund the majority of the Company's operating expenditure requirements for the year. In 2003 revenues from development and demonstration contracts are again expected, although there can be no assurance, to provide most of the cash necessary to fund operations.

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.

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, 2003, there were 21,592,669 shares of Common Stock issued and outstanding, with an additional 11,516,832 shares reserved for future issuance upon the conversion of preferred stock, the exercise of options and warrants, and the conversion of notes payable.

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 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 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 glow plug-based 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 weight. The SCS starting system uses commercial-off-the-shelf 12V glow plugs to directly vaporize the heavy fuel for cold starting. Once the engine has been started, the starting system is disabled.

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 oxides of nitrogen (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.

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.

Late in 2001 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. Ricardo presented these 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.

Ricardo is introducing the SCS "Low Soot" design results to engine manufacturers and piston suppliers. 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.

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 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.

The Company has come to realize that it lacks the resources to address issues such as piston manufacturing processes, durability testing, and cost analysis. The Company is now seeking commercial partners, such as independent engine testing firms or major component suppliers, to achieve a maturation of the SCS relative to the expectations of engine manufacturers. In the meantime, development of the LSDD is being continued in 2003 under a program being funded from a subcontract awarded to Sonex under a U.S. Department of Energy program as described in the following section under the heading "SCS and NEA Membrane Technology".

SCS FOR LOW COMPRESSION RATIO DI ENGINES

SCS Stratified Charge Radical Ignition (SCRI)

Sonex is developing a new, enhanced SCS process with a design similar to the LSDD, focusing on the control of ignition for low compression ratio four-stroke DI engines. 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.

SCRI is an unthrottled, low compression ratio, sparkless, compression ignition process at gasoline compression ratios. The SCRI 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 microchambers for SCRI place a special design emphasis on chemical aspects, allowing controlled auto ignition of any fuel at low compression ratios. The SCS SCRI 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. The inherent light weight of the gasoline engine is preserved and peak combustion pressures are limited to those of gasoline operation.

The SCRI process for low compression ratio DI engines was developed in a single-cylinder research engine in the fully equipped Sonex laboratory in Annapolis. The SCRI combustion process for control of ignition and combustion was researched 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 diesel-type heavy fuels, 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 SCRI 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 SCRI combustion technology aimed at transferring the SCRI results achieved on the Sonex 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 SCRI 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 SCRI results to a multi-cylinder engine.

The Company has come to realize that it lacks the resources to address issues such as piston manufacturing processes, durability testing, and cost analysis. The Company is now seeking commercial partners, such as independent engine testing firms or major component suppliers, to achieve a maturation of the SCS relative to the expectations of engine manufacturers. In the meantime, development of the SCRI for DI engines is being continued in 2003 under two government funded programs as described below under the headings "SCS and NEA Membrane Technology" and "SCRI for Heavy Fuel Engines".

SCRI and HCCI Gasoline Combustion

Sonex believes that SCRI 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 SCRI process, Sonex believes it has attained the control of ignition that will make HCCI viable for military and commercial application. A new Sonex technical paper supporting the theoretical aspects of SCRI will be presented by Sonex consultant David A. Blank, Ph.D. in May 2003 at a joint U.S. and Japan Society of Automotive Engineers Fuels and Lubricants meeting in Yokohama, Japan.

On the basis of the extensive SCRI single cylinder laboratory engine work it has performed with alcohol fuels, 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 SCRI combustion process, radical (chemical) species that enable compression ignition are created by interaction of the injected fuel spray with specially designed microchambers 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.

SCRI 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.

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 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.

Sonex believes that with further development using gasoline, SCS SCRI (sparkless 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 SCRI in-cylinder combustion process, Sonex expects to be able to achieve better performance, increased fuel mileage, and reduced NOx without sacrificing safety.

Sonex now feels that the very technically descriptive "Stratified Charge, Radical Ignition" name given originally by Sonex to this enhanced SCS process does not highlight the special ability of this process, that is, control of low compression ratio auto ignition in a DI engine. Ignition control is the feature lacking in HCCI combustion but which gives remarkably low emissions and good fuel economy. Sonex is considering changing the name of its SCRI process to highlight the control of ignition, and is investigating names such as Sonex Controlled Auto Ignition (SCAI) and other combinations which including the term "controlled" to better communicate this key feature. Until completion of a review of all factors associated with instituting a formal name change and perhaps seeking trademark protection, the Company will continue to use the SCRI designation for this SCS process.

U.S. Fuel Economy Legislation

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. Recently, however, the future of CAFE and other national fuel economy solutions have become front-page political issues.

The fuel economy issue and potential increases in the CAFE standards were a major part of Congressional debate in 2002 on a broad national energy bill proposal. Senate hearings early in the year regarding follow-on legislation to CAFE resulted in proposals for much higher fuel economy standards for the near future. Opponents of the proposals, including automakers and the White House, objected on the basis that higher fuel mileage can only be achieved by building smaller, lighter - and therefore less safe - vehicles. Supporters of higher fuel economy standards, however, argued that by using technology currently available to automakers, the improvements can be accomplished without making vehicles smaller.

Many automakers are focusing their attention on hybrid propulsion technologies, such as gasoline/diesel-electric power plants, rather than improvements in combustion technology (more efficient ways of burning fuel). Hybrid power plants utilize the gasoline or diesel engine during steady speed operation. These engines operate at high rpm to develop the needed power for highway operation, and suffer from added weight.

In March 2002 the Senate rejected proposed tough new automobile fuel economy requirements and instead approved the Levin-Bond Amendment to the Senate Energy

Bill that is more industry-friendly. Under the amendment, before any increases in the CAFE standards are made, the Department of Transportation (DOT) would be tasked with developing CAFE proposals that would take into account a number of factors, including technological and economic feasibility, competitiveness of U.S. manufacturers, and motor vehicle safety. The Senate and the House version of the proposed Energy Bill did not proceed beyond the conference stage in 2002. A new Energy Bill is being developed in 2003. Sonex 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 SCRI combustion process and improved safety. The Company expects to provide additional input to the legislative process in 2003.

Sonex believes that, with further development, its SCRI, 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 believes the SCRI 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. Preliminary work at Sonex on gasoline has demonstrated that the SCRI process does achieve the desired control of ignition and high rate of heat releases which are necessary to achieve improved fuel consumption and lower emissions.

The Company hopes to progressively mature the SCRI 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 systems and the development of lighter weight vehicles or years of further R&D required for fuel cell technology to become practical. Such an achievement could also accelerate the evolution of hybrid gasoline and electric powered vehicles since a major improvement in engine fuel mileage would provide opportunities for tradeoff of vehicle weight versus power.

Development of the SCRI for DI gasoline engines could be continued in 2003 as a result of the government funded program described below under the headings "SCRI for Heavy Fuel Engines". Outcomes from this program for the transfer of the SCRI single-cylinder laboratory engine results to a modern, multi-cylinder, diesel engine should lead to a gasoline powered version of the engine with which to validate the SCRI technology.

SCS and NEA Membrane Technology

Sonex also is investigating the potential of implementing the SCS piston-based technology in combination with a diesel engine emissions reduction technology being developed by Compact Membrane Systems, Inc. (CMS), of Wilmington, Delaware. The CMS technology is based on a 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 was conducted on the Sonex laboratory, single-cylinder, normally aspirated, DI diesel engine. Results 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 $458,862 subcontract, of which $100,000 is cost-shared (funded) by Sonex, under DOE's SBIR Phase II prime contract awarded earlier in the year to CMS to transfer the Phase I single-cylinder results to a multi-cylinder engine. In March 2003 Sonex took delivery of the test engine, a state-of-the-art, three-cylinder, DI, turbo-charged, automotive diesel engine used by a major international vehicle manufacturer in the U.S. government funded PNGV (Partnership for a New Generation Vehicle). The estimated value of the contribution by the vehicle manufacturer of the automotive diesel engine and associated technical support represents the Sonex cost-sharing portion of the subcontract.

Early stages of the Phase II project will focus on the emissions reduction capabilities of the SCS "Low Soot" and SCRI pistons separately to provide data for evaluation by DOE and commercial interests. Subsequent testing in combination with the NEA membrane will demonstrate the viability for commercialization of the synergy of SCS configurations and the CMS membranes. This program would provide SCRI data on a multi-cylinder diesel engine for presentation to any engine manufacturer.

SCRI for Heavy Fuel Engines

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 "heavy fuel" (such as D2 diesel, JP-5 and JP-8). Heavy fuels are less volatile than gasoline, thereby reducing the hazard associated with 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.

In October 2002 the Company received a $744,246 contract from the Defense Advanced Research Projects Agency (DARPA) to begin the design and development of an HFE conversion process for a gasoline automotive engine for potential use in a developmental UAV. The contract program with DARPA focuses on the SCS SCRI process to convert an existing SI, four-stroke, gasoline engine to heavy fuel operation. The primary objective of this program is to transfer the SCRI heavy fuel design achieved in the Sonex single-cylinder laboratory engine to a modern six-cylinder, gasoline automotive engine, eliminate the spark ignition system, and produce the same power the engine originally produced on gasoline.

As of March 2003, Sonex has completed a design review with DARPA and is progressing to engineer the hardware for the SCS conversion. Suppliers have been engaged and are responsive to this project. Outcomes from this program should validate the SCRI 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 SCRI 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 current gasoline

engines which too often result in dangerous onboard fires.

SCS FOR SI HEAVY FUEL ENGINES

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, 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. 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. The requirement for a single military fuel is also a logistics issue, as the military seeks to minimize the number and complexity of fuels.

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. 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 weight. The SCS starting system uses commercial-off-the-shelf 12V glow plugs to directly vaporize the heavy fuel for cold starting. Once the engine has been started, the starting system is disabled.

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. An SCS two-stroke HFE development program has been initiated as described below on a three-cylinder, fuel injected gasoline engine which displaces 939 cc (313 cc/cylinder).

Under a "best efforts" feasibility demonstration contract from the U.S. Marine Corps (USMC) Systems Command in Quantico, Virginia, in 1998 the Company delivered five prototype UAV HFEs. Sonex successfully converted the existing SI, carburetted, 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 applications include outboard engines, small watercraft used as targets, and generator sets.

The Company's objective is 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 months 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, 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 for use in a UAV weapon system. SAIC, a leader in the development of advanced gun weapon systems including launchers and smart projectiles, is the DoD prime contractor for this developmental UAV for which the objective is to develop and demonstrate the military utility of a low cost loitering UAV system capable of providing several hours of continuous electronic warfare jamming and loitering "on-demand" warhead delivery. 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 gasoline engine 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.

After repeated testing, Sonex found that the candidate engine did not produce the advertised power and suffered from operational problems as well. At the same time, SAIC found that the competing rotary HFE suffered from poor fuel consumption. During the first quarter of 2003, the DoD sponsor expressed a desire to have Sonex work with the competing rotary HFE to focus on improving its fuel consumption. DoD engine experts have concluded that Sonex has a unique fuel handling and combustion technology, which when applied to the rotary engine, will allow for a reduction in fuel consumption and significantly improve engine performance in a heavy fuel configuration. The DoD sponsor has now directed SAIC to develop a new statement of work and arrange for the two companies to work together. This joint effort is expected to be formalized during the second quarter of 2003.

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 recently 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 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.

During 2003 Sonex is exploring a relationship with another small company which is developing rotary engines for use in generator sets for military and commercial use.

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.

SECRECY AND NON-DISCLOSURE

Due to the highly competitive nature of the world's automotive and truck industries, in connection with its contracts and/or demonstration programs with such 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

At the 2002 Annual Meeting of the Company's security holders held on October 9, 2002, the holders of the Company's Common Stock re-elected Mr. John H. Drewanz as a Class II director for a term expiring at the annual meeting to be held in 2003, and the holders of the Company's Preferred Stock re-elected Mr. Lawrence H. Hyde as a Class II director for a term expiring at the annual meeting to be held in 2003, and Mr. Charles C. McGettigan and Mr. Myron A. "Mike" Wick, III, as Class I directors for terms expiring at the annual meeting to be held in 2005. The only other director whose term continued beyond the 2002 Annual Meeting was Dr. Andrew A. Pouring, a Class III Common Stock director whose term expires at the annual meeting to be held in 2004.

No other matters were submitted to a vote of security holders during the fourth quarter of 2002.

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.

The high and low closing prices of the Common Stock for each quarterly period

since January 1, 2001 were as follows:

Quarter ended:	High	Low
March 31, 2001	$.25	$.14
June 30, 2001	.37	.22
September 30, 2001	.33	.16
December 31, 2001	.40	.15
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

The closing prices of the Common Stock presented above were obtained from the historical pricing information available on the NASDAQ website www.nasdaq.com.

SHARES OUTSTANDING AND RESERVED FOR ISSUANCE; HOLDERS; DIVIDENDS

As of March 31, 2003, there were 21,592,669 shares 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, 2003, a total of 11,516,832 shares are reserved for future Issuance as follows: 4,400,000 shares issuable upon the conversion of preferred stock outstanding; 4,523,058 shares issuable upon the exercise of options granted under the Company's Stock Option Plan (the "Option Plan"); 1,541,274 shares for options available to be granted; 992,500 shares issuable upon the exercise of outstanding warrants; 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. Detailed information as of December 31, 2002 with respect to Common Stock issuable under the Plan, including activity during 2002 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 2002 the Company issued the following securities without registration under the Securities Act of 1933 (the "Securities Act"). 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.

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 associated warrant to purchase Common Stock.

In May 2002 and July 2002 the Company issued a total of 20,000 shares of Common Stock to a consultant for services valued at $5,000.

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 in excess of $22 million and may continue to incur quarterly 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, however, revenues increased substantially, providing cash to fund the majority of the Company's operating expenditure requirements for the year. In 2003 revenues from development and demonstration contracts are again expected, although there can be no assurance, to provide most of the cash necessary to fund operations.

The Company is endeavoring to commercialize its SCS technology and, toward that end, expects significant personnel and financial resources will need to be applied. The application of personnel and financial resources is greatly constrained by the Company's liquidity problems and lack of capital.

In January 2003 the Company entered into a consulting agreement with the Annapolis, Maryland business consulting group Paradigm Technologies, LLC ("Paradigm"), for the services of its president, Mr. Glenn R. Beach, as a Senior Advisor to Sonex. Paradigm has been engaged to assess the Company's technologies and business model and suggest approaches for strategic alliances and additional market introductions for both commercial and military applications. Mr. Beach, who has spent much of his career in the defense industry, has focused his attention on the Sonex process for converting gasoline engines of various sizes to operate on safer, kerosene-based "heavy fuels" for use in military and commercial applications requiring light weight and safe handling and storage of fuel, such as in UAVs (unmanned aerial vehicles).

The Company's agreement with Paradigm extends through September 2003. Presently, Company management and Mr. Beach are pursuing a number of initiatives. One of the first goals is to secure cooperation with one or more companies which have technologies complementary to the Sonex processes. Additionally, Paradigm Technologies, leveraging an extensive network developed over many years with a unique understanding and capability to access various agencies within the U.S. Government, will also seek additional funding for Sonex to conduct technology development work necessary for addressing commercialization issues.

FINANCIAL POSITION AND LIQUIDITY

During much of 2001 and through the third quarter of 2002, the Company operated under severe cash flow difficulties. At times during 2001 the Company's two officers voluntarily and at their own discretion deferred receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements, although some of these amounts were repaid by the end of the year.

In late December 2001 Sonex took steps to reduce further its monthly cash requirements by eliminating one full-time technical position and by restructuring compensation arrangements with its part-time consultants. A second full-time technical position became vacant at the end of February 2002.

Beginning once again in January 2002, the Company's officers voluntarily and at their own discretion deferred receipt of payment of significant portions of their current wages for most of the year to reduce the Company's monthly cash requirements. With the generation of cash flow from revenues during the latter part of 2002, some of these amounts were repaid by the end of the year, and the Company hired additional technical personnel. Since December 2002, the Company's chief financial officer has been receiving his current wages, while the Company's chief executive officer continues to defer a significant portion of his current wages. Such wages payable to the Company's officers totaled $199,992 as of December 31, 2002 and are payable upon demand. Through March 31, 2003, the Company's chief executive officer had deferred an additional $9,255.

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 such outstanding amounts as soon as cash flow permits. The amount and timing of such payments will be determined at the discretion of the Company's officers, as these amounts are not subject to the terms of the Company's written agreement with current and former employees to defer payment of portions of their salaries as described below. Similar arrangements exist for unpaid consulting fees, the majority of which amounts are payable to the individual who serves as the Company's director of business development and technical program manager on a part-time basis.

As of March 31, 2003, the Company had available cash and equivalents of approximately $110,000 and accounts receivable, including contract costs incurred but not yet billed, of approximately $95,000. 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 December 31, 2003. 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 objectives.

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 an adverse effect on the Company's relationships with government funding sources, strategic partners and potential customers.

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.

ONGOING 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 2002, certain amounts for 2001 and 2000 presented in prior years as research and development expenses (R&D) have been reclassified to cost of revenue.)

	2002	2001	2000
Total revenue	$ 471,912	$ 245,291	$ 407,898
Cost of revenue	266,837	164,698	302,994
Research and development(R&D)expenses	224,881	435,249	379,087
General and administrative(G&A)expenses	304,593	337,099	332,607
Total expenses	796,311	937,046	1,014,688
Net loss from operations	(324,399)	(691,755)	(606,790)
Investment income	2,759	1,400	4,860
Net loss	$ (321,640)	$ (690,355)	$ (601,930)

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 net loss for 2001 is $88,425, or 15%, higher than the net loss for 2000, as a significant decrease in revenue was offset in part by lower related cost of revenue.

Revenue and cost of revenue:

	2002	2001	2000
Defense/government revenue	$ 471,912	$ 145,291	$ 337,898
Commercial revenue		100,000	70,000
Total revenue	$ 471,912	$ 245,291	$ 407,898
Cost of revenue	$ 266,837	$ 164,698	$ 302,994

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, however, 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 2002 to 2001

Total revenue increased $226,621, or 92%, from 2001 to 2002. 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. Department of Defense (DoD) and other 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.

The following is a listing of the three major new projects. 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. Awarded third quarter of 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). Awarded fourth quarter of 2002. Total funding of $744,246. Completion expected in late 2003 or early 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. 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 these three programs, work on each of which continues into 2003, totaled $391,155 and represented 83% of total revenues recognized in 2002. The following table summarizes revenue recognized in 2002 and the potential revenue remaining for future periods in connection with these three programs. Although management believes that each program will be funded for the entire amount awarded to date, there is no assurance that this will be the case.

	SAIC	DARPA	CMS/DOE
Revenue recognized in 2002	$ 226,247	$ 109,024	$ 55,884
Potential revenue for future periods	55,700	635,622	302,978
	$ 281,947	$ 744,646	$ 358,862

Progress on commercial applications of the Company's diesel engine emissions reduction technology slowed considerably in 2002, but outcomes in 2003 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 SCRI 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 (54%) 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.

Comparison of 2001 to 2000

Total revenue decreased $162,607, or 40%, from 2000 to 2001, with defense/government revenue declining by $192,607, or 57%, from 2000. Defense/government revenue for 2001 came from four contracts, three of which were for UAV gasoline engine conversions to heavy fuel operation. Approximately $260,000 of the defense revenue reported for 2000 relates to a sub-contract awarded in 1999 from a prime contractor to the U.S. Navy pursuant to which Sonex demonstrated the technical feasibility of converting an existing high performance, gasoline fueled engine for marine use to start and operate on heavy fuels. The Company devoted a significant portion of its available resources to the performance of this sub-contract from late in 1999 through mid-2000 when work was substantially completed. The Company did not receive a follow-on contract from the Navy, and no other contract of similar size was received in 2001. The remaining defense revenue for 2000 consisted of five smaller contracts, including three contracts for UAV gasoline engine conversions to heavy fuel operation.

Revenue from commercial contracts, earned in connection with the Company's DI diesel engine piston technology, increased $30,000 from 2000 to 2001. All of the revenue for 2001 was earned from a program with a foreign engine manufacturer for a feasibility study of the Company's SCRI technology in diesel truck engines. Revenue of $50,000 also was earned in 2000 from this manufacturer in connection with a test program for the Company's SCS "Low Soot" design. The Company also recognized revenue of $20,000 in 2000 from a second foreign engine manufacturer. None of these programs continued beyond 2001.

Cost of revenue decreased from 2000 to 2001 as a result of the lower revenue generated in 2001, primarily resulting from the completion in 2000 of the major contract from the Navy. As a result, a smaller percentage of R&D personnel's time was spent on funded contracts in 2001 versus 2000, with the associated charges being recorded as R&D rather than cost of revenue. Such amounts were substantially higher in 2000 than in 1999 due to the relative sizes of the government contracts being performed at the time. A small portion of total cost of revenue for each period represented charges directly attributable to funded commercial projects.

Research and development (R&D) expenses:

	2002	2001	2000
Personnel (includes stock and options):			
Employee compensation	$ 255,443	$ 335,605	$ 333,027
Taxes & benefits	30,491	54,730	48,594
Consulting fees	44,008	64,587	115,672
Total personnel	329,942	454,922	497,293
Project parts and supplies	66,532	28,116	49,343

Occupancy	46,151	47,591	48,785
Depreciation, patent amortization and write-off of abandoned patents	35,133	52,326	62,409
Patent maintenance and renewal fees	8,022	7,243	8,831
Other expenses	5,938	9,749	15,420
Total R&D expenses	491,718	599,947	682,081
Less amounts classified as cost of revenue:			
Personnel	(159,250)	(106,168)	(192,330)
Labor overhead	(51,151)	(53,917)	(74,407)
Project parts and supplies	(55,637)	(3,598)	(32,951)
Other expenses	(799)	(1,015)	(3,306)
Net R&D	$ 224,881	$ 435,249	$ 379,087

The following analysis is based on a comparison of total R&D expenses as listed above before deduction of amounts classified as cost of revenue.

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 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.

Comparison of 2001 to 2000

Total R&D expenses decreased by $82,134, or 12%, from $682,081 in 2000 to $599,947 in 2001, primarily as a result of a decrease in funded contracts from 2000 to 2001.

Personnel costs decreased by $42,371 from 2000 to 2001, with a $51,085, or 44%, reduction in consulting fees accounting for the decline while employee compensation increased only slightly. Total consulting fees for funded contracts decreased from $55,968 in 2000 to zero in 2001 with the completion of a major contract in 2000. 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. A slight increase of $2,883 was experienced for other consulting charges for services of the Company's R&D Supervisor and International Liaison Officer who resides in Europe. This individual is compensated primarily in the form of restricted stock for work performed in Europe based on part-time service, while for time spent in Annapolis he receives cash compensation for full-time service. His expenses are also reimbursed in cash. The Company recorded charges of $53,837 in 2001 and $50,664 in 2000 in connection with the issuance of stock as compensation to this consultant, who spent no time in Annapolis in 2001 or 2000

The increase in employee compensation of 2,578, or 1%, from 2000 to 2001, resulted from a number of offsetting differences. A decrease in shop salaries occurred in part because there was no related amount in 2001 for the salary of a technician hired early in 2000 who was employed only until October 2000. In addition, the Company's machinist reduced his work schedule for a few months during the summer of 2001 and his employment was eventually terminated in December 2001. On the other hand, total wages increased due to higher wage rates in 2001 for two shop employees and as a result of a larger amount of bonuses awarded - $32,500 in 2001 versus $20,000 in 2000, including a higher bonus award to the Company's CEO and Chief Scientist of $25,000 in 2001 versus $10,000 in 2000. These bonuses are awarded in December of each year with the stipulation that payment of such amounts is to be deferred until the Board of Directors determines that the Company's cash resources are sufficient. The 2001 bonus award to the CEO was higher than in the previous year to reflect the fact in 2001 the CEO 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. Payroll taxes and employee benefits in total increased $6,136, or 13%, from 2000 to 2001, due primarily to an increase in health insurance premium rates.

Total project parts and supplies expense decreased by $21,227, or 43%, from 2000 to 2001, as expenditures for funded contracts declined by $29,353 primarily due to the completion of the Navy contract in 2000. As a result of fewer hours being spent on funded contracts, more time was spent on un-funded research in 2001, thus leading to more purchases of parts and supplies that could not be reclassified to cost of revenue, which amounted to an increase of $8,126.

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 $10,083, or 16%, from 2000 to 2001. The largest component is patent write-offs, which were lower by $14,816, decreasing from $38,069 in 2000 to $23,253 in 2001. Ongoing patent amortization increased $5,620 from 2000 to 2001, as amortization began on capitalized costs for several patents which were granted during 2001. Depreciation expense decreased only $887 from 2000 to 2001 as there were minimal asset additions made in 2001 and 2000.

General and administrative (G&A) expenses:

	2002	2001	2000
Personnel (includes stock and options):			
Employee compensation	$ 130,715	$ 125,557	$ 113,564
Consulting fees	59,778	79,186	80,836
Amortization of deferred compensation from grant of stock options		29,761	29,764
Taxes & benefits	8,916	10,352	9,560
Total personnel	199,409	244,856	233,724
Occupancy	10,651	10,882	11,727
Proxy solicitation & annual meeting	17,862	19,618	19,545
Legal fees	11,435	5,264	8,873
Investor relations	19,942	1,520	
Audit fees	9,180	9,450	9,150
Stock transfer agent fees	8,098	8,496	8,743
Other expenses	28,016	37,013	40,485
Total G&A	$ 304,593	$ 337,099	$ 332,607

Comparison of 2002 to 2001

Total G&A expenses decreased by $32,506, or 10%, from 2001 to 2002, as decreases in personnel costs and other expenses were partially offset by increases in 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 CFO remained the same in both years.

Consulting fees in total 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. The Company pays 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.

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.

Comparison of 2001 to 2000

Total G&A expenses increased by $4,492, or 1%, from 2000 to 2001, as an increase in personnel costs was only partially offset by a decrease in legal fees and other expenses. The increase in employee compensation of $11,993, or 11%, from 2000 to 2001 resulted primarily from a higher bonus award to the Company's CFO ($25,000 in 2001 versus $10,000 in 2000). The bonus is awarded in December of each year with the stipulation that payment of such amount is to be deferred until the Board of Directors determines that the Company's cash resources are sufficient. The 2001 bonus award was higher than in the previous year to reflect the fact in 2001 the CFO 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. The increase in the

bonus award was offset in part by a decrease in the use of part-time clerical help in 2001 as opposed to 2000.

Consulting fees decreased by $1,650, or 2%, from 2000 to 2001. 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) increased by $8,350, from $60,836 in 2000 to $69,186 in 2001. The Company pays this consultant part in cash and part in stock options for business development services. Charges paid through stock options totaled $42,120 in 2001 versus $33,625 in 2000. 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. This increase in fees was offset by a 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 as opposed to $20,000 in 2000. 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.

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.

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 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 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.

ADOPTION OF NEW ACCOUNTING PRONOUNCEMENTS

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

The Company may in the future adopt 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 stock-based compensation. As detailed in Note 14 to the accompanying financial statements, the Company has been accounting 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 Company provides additional pro forma disclosures as required under SFAS No. 123 to present net loss and net loss per share as determined by applying the fair valued based method of accounting.

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 stock-based employee compensation. SFAS, effective for financial statements for fiscal years ending after December 15, 2002, enables companies to recognize expense for the fair value of their past and present stock option awards as soon as the conversion to the fair value based method is made. The adoption by the Company in the future of the fair value based method under SFAS No. 123 pursuant to the provisions of SFAS No. 148 is expected to have a material impact on its financial statements.

The adoption by the Company in fiscal 2003 of other 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:

Statements of operations and accumulated deficit for the three years ended December 31, 2002

Statements of paid-in capital for the three years ended December 31, 2002

Statements of cash flows for the three years ended December 31, 2002

Notes to financial statements

REPORT OF INDEPENDENT ACCOUNTANTS

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

We have audited the accompanying balance sheet of Sonex Research, Inc. (the "Company") as of December 31, 2002, and the related statements of operations and accumulated deficit, paid-in capital and cash flows for the year then ended. 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 financial position of Sonex Research, Inc. as of December 31, 2002, and the results of its operations and its cash flows for the year then ended, 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.

HAUSSER + TAYLOR LLP

Cleveland, Ohio
March 21, 2003

REPORT OF INDEPENDENT ACCOUNTANTS

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

We have audited the accompanying balance sheet of Sonex Research, Inc. (the "Company") as of December 31, 2001 and the related statements of operations and accumulated deficit, paid-in capital and cash flows for the years ended December 31, 2001 and 2000, 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, 2001, and the results of its operations and its cash flows for the years ended December 31, 2001 and 2000, 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.

C. L. STEWART & COMPANY

Annapolis, Maryland
April 10, 2002

SONEX RESEARCH, INC.
BALANCE SHEETS

	December 31,	
	2002	2001
ASSETS		
Current assets		
Cash and equivalents	$ 105,998	$ 3,355
Accounts receivable	64,702	37,828
Prepaid expenses	25,814	25,783
Loans to officers and employees (Note 4)	22,500	22,500
Total current assets	219,014	89,466
Patents (Note 6)	203,623	204,088
Property and equipment (Note 7)	58,808	57,249
Total assets	$ 481,445	$ 350,803
LIABILITIES AND STOCKHOLDERS' EQUITY/(DEFICIT)		
Current liabilities		
Accounts payable and other accrued liabilities	$ 36,322	$ 38,923
Deferred revenue - billings in excess of costs and estimated profits on contracts in progress (Note 8)	66,587	
Current portion of capital lease obligations	5,657	
Notes payable to shareholder (Note 9)	37,327	
Accrued compensation and benefits (Note 10)	427,397	229,228
Total current liabilities	573,290	268,151
Capital lease obligations	10,985	
Deferred compensation (Note 11)	906,856	857,944

Stockholders' equity/(deficit)		
Preferred stock, $.01 par value, 2,000,000 shares authorized and issued, 1,540,001 shares outstanding	15,400	15,400
Common stock, $.01 par value, 48,000,000 shares authorized, shares issued and outstanding: 21,592,669 in 2002 and 21,212,669 in 2001	215,927	212,127
Additional paid-in capital	21,420,742	21,334,577
Accumulated deficit	(22,640,911)	(22,319,271)
Notes receivable from officers and employees (Note 5)	(20,844)	(18,125)
Total stockholders' equity/(deficit)	(1,009,686)	(775,292)
Commitments (Note 16)		
Total liabilities and stockholders'equity/(deficit)	$ 481,445	$ 350,803

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

SONEX RESEARCH, INC.

STATEMENTS OF OPERATIONS AND ACCUMULATED DEFICIT

	Year ended December 31,		
	2002	2001	2000
Revenue			
Defense/government	$ 471,912	$ 145,291	$ 337,898
Commercial		100,000	70,000
	471,912	245,291	407,898
Costs and expenses			
Cost of revenue	266,837	164,698	302,994
Research and development	224,881	435,249	379,087
General and administrative	304,593	337,099	332,607
	796,311	937,046	1,014,688
Net loss from operations	(324,399)	(691,755)	(606,790)
Investment income	2,759	1,400	4,860
Net loss	(321,640)	(690,355)	(601,930)
Accumulated deficit			
Beginning of period	(22,319,271)	(21,628,916)	(21,026,986)
End of period	$(22,640,911)	$(22,319,271)	$(21,628,916)
Weighted average number of common shares outstanding	21,495,529	20,224,090	18,472,727

Net loss per share (basic and diluted)	$ (.015)	$ (.034)	$ (.033)

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

SONEX RESEARCH, INC.
STATEMENTS OF PAID-IN CAPITAL

	Price per share	Preferred stock ($.01 per share) Shares	Amount	Common stock (.01 par value) Shares	Amount	Additional paid-in capital
Balance, January 1, 2000		1,540,001	$15,400	18,008,169	$180,082	$20,430,476
February exercise of warrants	$.35			285,000	2,850	96,900
March for services	.40			24,130	241	10,125
June exercise of warrants	.375			196,667	1,967	71,783
June exercise of warrants for notes	.375			48,333	483	17,642
June for services	.41			31,538	315	12,695
September for services	.24			56,877	569	13,181
December private placement	.25			775,000	7,750	186,000
December for services	.25			54,154	542	12,996
Stock option compensation						45,875
Amortization of deferred compensation from grant of stock options						29,764
Balance, December 31, 2000		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 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 payables						10,000
Stock option compensation						42,120
Amortization of deferred compensation from grant 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

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

SONEX RESEARCH, INC.
STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2002	2001	2000
Cash flows from operating activities			
Net loss	$(321,640)	$(690,355)	$(601,930)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities			
Depreciation	17,956	15,441	16,328
Amortization of patents	17,177	36,885	46,091
Amortization of deferred compensation from grant of stock options		29,761	29,764
Current charges paid in stock or options	35,965	95,957	96,539
Accrued interest on loans to/notes from employees	(2,719)		
Accrued interest on notes to shareholder	1,327		
(Increase) decrease in accounts receivable	(26,874)	(20,488)	60,121
(Increase) decrease in prepaid expenses	(32)	1,359	2,694
Increase (decrease) in accrued liabilities	195,569	128,569	10,989
Increase (decrease) in billings in excess of costs on contracts in progress	66,587		
Increase (decrease) in deferred compensation	48,912	47,100	47,100
Net cash provided by (used in) operating activities	32,228	(355,771)	(292,304)
Cash flows from investing activities			
Acquisition of property and equipment	(1,869)	(3,664)	(1,386)
Additions to patents	(16,712)	(25,266)	(42,022)
Net cash used in investing activities	(18,581)	(28,930)	(43,408)
Cash flows from financing activities			
Issuance of stock - private placements	54,000	288,750	193,750
Issuance of stock - exercise of warrants			173,500
Issuance of notes payable to shareholder	36,000		
Reduction of capital lease obligations	(1,004)		
Forgiveness of payables		10,000	
Net cash provided by financing activities	88,996	298,750	367,250
Increase (decrease) in cash	102,643	(85,951)	31,538
Cash at beginning of period	3,355	89,306	57,768
Cash at end of period	$ 105,998	$ 3,355	$ 89,306
Non-cash transactions - equipment acquired			

through capital lease obligation	$ 17,646

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

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 2002, most notably the reclassification of amounts in the Statement of Operations from Research and Development to Cost of Revenue.

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

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:The Company accounts 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 Company provides additional pro forma disclosures as required under Statement of Financial Accounting Standards (SFAS) No. 123 - "Accounting for Stock-based Compensation".

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 2002 the Company's primary customers were branches of the U.S. government and military or their prime contractors. Revenues generated from such customers under three contracts-in-progress represented 83% of total revenues in 2002.

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 Company's accounts receivable at December 31, 2002 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: In June 2001 the Financial Accounting Standards Board ("FASB") issued SFAS No. 142, "Goodwill and Other Intangible Assets." Under SFAS No. 142, goodwill and intangible assets deemed to have indefinite lives are no longer amortized but are subject to periodic impairment tests. Other intangible assets continue to be amortized over their useful lives.

In August 2001 the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations," which is effective the first quarter of fiscal year 2003. SFAS 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement cost.

In October 2001 the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-lived Assets," which was adopted by the Company in 2001. SFAS No. 144 supercedes SFAS No. 121 and modifies and expands the financial accounting and reporting for the impairment or disposal of long-lived assets other than goodwill.

In April 2002, the FASB issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections." Provisions of SFAS No. 145 become effective in 2002 and 2003. Under SFAS No. 145, gains and losses from the extinguishment of debt should be classified as extraordinary items only if they meet the criteria of Accounting Principles Board Opinion No. 30. SFAS No. 145 also addresses financial accounting and reporting for capital leases that are modified in such a way as to give rise to a new agreement classified as an operating lease.

In June 2002 the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," which is effective for exit or disposal activities initiated after December 31, 2002. SFAS No. 146 nullifies Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." Under SFAS No. 146, a liability is required to be recognized for costs, including certain lease termination costs and employee termination benefits, associated with an exit or disposal activity when the liability is incurred. SFAS No. 146 applies to costs associated with an exit activity that does not involve an entity newly acquired in a business combination or with a retirement or disposal activity covered by SFAS Nos. 143 and 144.

In November 2002, the FASB issued FIN 45, which expands previously issued accounting guidance and disclosure requirements for certain guarantees. FIN 45 requires the recognition of an initial liability for the fair value of an obligation assumed by issuing a guarantee. The provision for initial recognition and measurement of the liability will be applied on a prospective basis to guarantees issued or modified after December 31, 2002.

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

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based, Compensation - Transition and Disclosure," that amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition to the fair value method of accounting for stock-based employee compensation. SFAS No. 148 also amends the disclosure provisions of SFAS No. 123 and APB Opinion No. 28, "Interim Financial Reporting," to require disclosure in the summary of significant accounting policies of the effects of an entity's accounting policy with respect to stock-based employee compensation on reported net income and earnings per share in annual and interim financial statements. The Statement does not amend SFAS No. 123 to require companies to account for employee stock options using the fair value method. The Statement is effective for fiscal years beginning after December 15, 2002. The voluntary adoption by the Company in the future of the fair value based method under SFAS No. 123 pursuant to the provisions of SFAS No. 148 is expected to have a material impact on its financial statements.

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 the ongoing 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 Company will have sufficient capital to fund operations until approximately December 31, 2003. 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 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 due date of the loans was recently extended to December 31, 2003.

NOTE 5 - NOTES RECEIVABLE FROM OFFICERS AND EMPLOYEES

In connection with the exercise of warrants to purchase shares of common stock in June 2000 (see Note 13), 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 $2,719 having been accrued as of December 31, 2002.

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,	
	2002	2001
Capitalized costs	$ 264,532	$ 251,243
Accumulated amortization	(60,909)	(47,155)

$ 203,623	$ 204,088

Amortization of patent costs was $13,754 in 2002, $13,632 in 2001, and $8,022 in 2000. Annual patent cost amortization is expected to range from $12,000 to $15,000 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 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 $3,423 in 2002, $23,253 in 2001 and $38,069 in 2000 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,	
	2002	2001
Shop equipment	$ 474,940	$ 460,821
Office equipment	22,225	36,900
	497,165	497,721
Accumulated depreciation	(438,357)	(440,472)
	$ 58,808	$ 57,249

NOTE 8 - DEFERRED REVENUE

In connection with development and demonstration 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. The $66,587 balance of deferred revenue as of December 31, 2002 consists of the excess of billings ($401,858) over costs incurred and estimated profit or loss ($335,271) on two contracts in progress. Such amounts are expected to be recognized as revenue during 2003 as the contracts are completed. There were no contracts for which costs and estimated profits incurred exceeded billings as of December 31, 2002.

NOTE 9 - NOTES PAYABLE TO SHAREHOLDER

In connection with a private placement in March 2002 as detailed in Note 13, the Company issued a $6,000 note, 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, 2003. The note has an interest rate of 6%, with a total of $275 in interest having accrued through

December 31, 2002. In July 2002 the Company issued a $30,000 note to this same shareholder payable initially on January 31, 2003. The due date of the note also has been extended to June 30, 2003. This note carries an interest rate of 8%, with a total of $1,052 in interest having accrued through December 31, 2002. Payment of both notes is secured by Company revenues.

NOTE 10 - ACCRUED COMPENSATION AND BENEFITS

Accrued compensation consists of the following amounts payable to current and former employees:

	December 31,	
	2002	2001
Accrued wages	$ 235,515	$ 80,228
Accrued consulting fees	31,737	8,000
Accrued bonuses	95,499	83,000
Accrued vacation pay	64,646	58,000
	$ 427,397	$ 229,228

From early 2001 through late in 2002, the Company's officers voluntarily and at their own discretion deferred receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements. Since December 2002, the Company's chief financial officer has been receiving his current wages, while the Company's chief executive officer continues to defer a significant portion of his current wages. Such wages payable to the Company's officers totaling $199,992 are included in the total of accrued wages as of December 31, 2002 and are payable upon demand. 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 such accrued wages as soon as cash flow permits. The amount and timing of such payments will be determined at the discretion of the Company's officers, as these accrued wages are not subject to the terms of the Company's written agreement with current and former employees to defer payment of portions of their salaries as described in Note 11. Similar arrangements exist for consulting fees, the majority of which amounts are payable to the individual who serves as the Company's director of business development on a part-time basis.

In December of each of the last three years, the Company awarded 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. During 2001 the Company paid $12,500 of the bonuses accrued as of the previous year-end, portions of which payments represented the conversion of accrued bonuses to equity. In connection with a private placement in March 2002 as detailed in Note 13, the Company paid $22,500 of accrued bonuses and $4,500 of accrued consulting fees through the conversion of such amounts to equity. The amount of accrued bonuses included above that was payable to the Company's officers at December 31, 2002 and 2001 was $72,500 and $67,500, respectively.

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. Such amounts are

payable upon termination of employment and are not subject to the terms of the Company's written agreement with current and former employees to defer payment of portions of their salaries as described in Note 11. The amount of accrued vacation included above that was payable to the Company's officers at December 31, 2002 and 2001 was $48,856 and $41,406, respectively.

NOTE 11 - DEFERRED COMPENSATION

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 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,	
	2002	2001
Current officers	$ 574,249	$ 525,337
Current employees and consultants	31,864	62,088
Former officers and other employees	300,743	270,519
	$ 906,856	$ 857,944

Since January 1, 1997 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, and it is unlikely that such conditions will occur prior to December 31, 2003. 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, 2002, the Company had net operating loss ("NOL") carryforwards of approximately $12.5 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. Sales of marketable securities have also generated capital loss carryforwards for income tax purposes. Capital loss carryforwards, which expire after five years, may only be used to offset future capital gains. The Company's tax loss carryforwards are summarized as follows:

Expiration	NOL's	Capital
2003	$ 1,344,816	$ 365,147
2004	1,185,181	14,970
2005	900,267	
2006	1,060,169	
2007 - 2012	6,035,290	
2018 - 2022	1,937,079	
	$ 12,462,802	$ 380,117

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 $4.8 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 $6,619,599 have expired unused, as have capital loss carryforwards of $335,081.

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, 2002 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 February 2000 the Company received cash proceeds of $99,750 from the exercise of warrants to purchase 285,000 shares of its common stock at an exercise price of $.35 per share. In June 2000 the Company received cash proceeds of $73,750 from the exercise of warrants to purchase 196,667 shares, and accepted five-year notes receivable aggregating $18,125 from its chief financial officer and two other employees (see Note 5) for the exercise of warrants to purchase 48,333 shares, of its common stock, all at a price of $.375 per share.

In December 2000 the Company completed a private financing in which it raised $193,750 from a small number 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. A total of 775,000 shares of the Company's common stock and five-year warrants to purchase an additional 387,500 shares of common stock at $.50 per share were issued in this financing. No separate value has been reflected in the financial statements for the warrants issued in the above transaction based on management's belief that the separate fair value of such warrants is not significant.

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 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 local 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 local 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 2012.

Between January 1, 2000 and December 31, 2002, the Company had the following activity in options to purchase shares of common stock under the Plan:

	# of shares	Weighted average exercise price	# of shares exercisable	Weighted average exercise price
Unexercised at January 1, 2000	4,056,716	$.52	3,426,716	$.52
Granted	272,500	.39	153,750	.45
Becoming exercisable			186,250	.48
Exercised				
Lapsed or canceled	(6,000)	.50	(6,000)	.50
Unexercised at December 31, 2000	4,323,216	.51	3,760,716	.52
Granted	882,500	.25	411,250	.25
Becoming exercisable			405,000	.48
Exercised				
Lapsed or canceled	(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

Options granted under the Plan during 2002 include the grant of a ten-year option in November 2002 to the Company's chief financial officer to purchase 200,000 shares of common stock. These options are exercisable 50% on the date of grant 50% one year later. The exercise price of these options of $.25 per share was above the market price of the common stock at the grant date.

Options granted under the Plan during 2001 include grants of ten-year options in December 2001 to each of the Company's four outside directors to purchase 100,000 shares of common stock. These options vest at the rate of 25% per year beginning with the date of grant. Also in December 2001, the Company's chief executive officer and chief financial officer each were granted ten-year options to purchase 100,000 shares of common stock, exercisable 50% on the date of grant and 50% one year later. These options granted in December 2001 all have an

exercise price of $.25 per share, which price was above the market price of the common stock at the grant date.

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.

For options granted with an exercise price below the market price at the date of grant, the Company credits 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 charges a like amount to compensation expense in that year. There were no such charges from 2000 through 2002 in connection with options granted under the Plan. Certain consultants engaged by the Company have agreed to be compensated partially in cash and partially in stock options. While the exercise price of such options has been equal to or higher than the market price of the stock at each date of grant, the Company has 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, $42,120 in 2001, and $45,875 in 2000, 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 and $29,764 in 2000 was credited to additional paid-in capital and like amounts amortized to compensation expense in each of those years. Amortization of the these charges, recorded over the five-year vesting period of the option, was been 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.

While the Company applies APB Opinion No. 25 in accounting for stock option compensation, SFAS No. 123 requires 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. Accordingly, the Company has estimated the grant date fair value of each option using the Black-Scholes option pricing model with the following weighted average assumptions for 2002: volatility factor of 95%, average risk-free interest rate of 3.8%, zero dividend yield, and average expected term of eight years. For purposes of pro forma disclosures, the estimated fair value of options is amortized to expense over the vesting period of each option.

Had compensation cost for options granted under the Plan and for the options granted by Proactive to the Company's president been determined consistent with the method of SFAS No. 123 using the weighted average fair value of options granted during the year as indicated below, the Company's net loss and net loss per share for each year on a pro forma basis would have been as follows:

	2002	2001	2000
Weighted average fair value per share	$.15	$.19	$.37
Net loss - as reported	$321,640	$690,355	$601,930

Net loss - pro forma	$465,693	$948,089	$850,486
Net loss per share - as reported	$.015	$.034	$.033
Net loss per share - pro forma	$.022	$.047	$.046

The increase of $144,053 from the reported net loss to the pro forma net loss for 2002 associated with the charges for the estimated fair value of options consists of $14,440 for options granted in 2002 and $129,613 for options granted in prior years.

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

As of December 31, 2002, 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	1,095,792
Exercisable at $.50 per share	2,787,266
Exercisable at $.75 per share	196,000
Exercisable at $1.00 per share	50,000
	4,129,058
Granted options becoming exercisable in the future:	
Exercisable at $.25 per share	394,000
Options available for future grants	1,541,274
Conversion of note payable	60,000
Conversion of preferred stock	4,400,000
Total shares reserved	11,516,832

In February 2000 warrants exercisable at $.35 and $.75 per share to purchase 285,000 and 3,098,209 shares, respectively, of common stock expired unexercised.

In June 2000 warrants exercisable at $.375 and $.50 per share to purchase 350,000 and 590,000 shares, respectively, of common stock expired unexercised. 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 2002 and 2001, and $47,000 in 2000, while the Company also earned sublease income of $4,050, $3,000, and $2,400 in 2002, 2001 and 2000, 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.

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

On September 16, 2002, the Company was informed by its independent accountants, C.L. Stewart & Company, that the firm was discontinuing its audit practice and would not serve as independent accountants of the Company for the year ended December 31, 2002. C.L. Stewart & Company agreed to remain as independent accountants, including to conduct the review of the Company's unaudited financial statements for the quarter ending September 30, 2002, until the Company had engaged new independent accountants. The Company's Board of Directors accepted the decision of C.L. Stewart & Company to withdraw as independent accountants.

In connection with its audits for the two most recent fiscal years and through December 17, 2002, there were no disagreements with C.L. Stewart & Company on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of C.L. Stewart & Company, would have caused them to make reference thereto in their report on the financial statements for such years.

The report of C.L. Stewart & Company on the financial statements of the Company as of December 31, 2001 and for the years ended December 31, 2001 and 2000 presented in this Form 10-KSB, contains no adverse opinion or disclaimer of opinion and is not qualified or modified as to audit scope or accounting principle; however, such report is modified by the inclusion of an explanatory paragraph indicating that there is substantial doubt about the Company's ability to continue as a going concern.

The Company's Board of Directors engaged Hausser + Taylor LLP as new independent accountants as of December 17, 2002. During the two most recent fiscal years and through December 17, 2002, the Company has not consulted with Hausser + Taylor LLP regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the Company's financial statements, and neither a written report was provided to the Company nor oral advice was provided that Hausser + Taylor LLP concluded was an important factor considered by the Company in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of a disagreement, as that term

is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions to Item 304 of Regulation S-K, or a reportable event, as that term is defined in Item 304(a)(1)(v) of Regulation S-K.

The Company has had no disagreements with its current independent accountants, Hausser + Taylor LLP, on any matter of accounting principles or practices or financial statement disclosure.

PART III

ITEM 9. DIRECTORS, EXECUTIVE OFFICERS AND CONTROL PERSONS

The Company's Board of Directors is divided into two categories: "Common Stock" directors elected by the holders of Common Stock; and "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, 2003, 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. Since July 1997 the total number of directors has been set at five, and, since December 2001, the Board has consisted of three Preferred Stock directors and two Common Stock directors. In March 2003 Mr. John H. Drewanz, a Class II Common Stock director since October 2001 and Chairman of the Board since October 9, 2002, resigned from the Board. Mr. Drewanz informed other directors that he had made all the contributions he could as a director and believes the Company is in capable hands with its current management and other members of the Board. As of March 31, 2003, the Board had not filled the vacancy and had not named a new Chairman. The Board expects to fill the Class II Common Stock director vacancy in the near future and that individual, or such other person as may be validly nominated to fill the vacancy, shall be elected by the shareholders at the next annual meeting to serve the remaining scheduled term as a Class II director or until his successor is elected and qualified.

Directors of the Company do not receive fees for their services, but are eligible to receive stock option grants 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.

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 director expires	Position
Preferred Stock Directors:			

Lawrence H. Hyde	78	2003	Class II Director
Charles C. McGettigan	58	2005	Class I Director
Myron A. "Mike" Wick, III	59	2005	Class I Director
Common Stock Director:			
Andrew A. Pouring	71	2004	Chief Executive Officer, Chief Scientist, and Vice Chairman of the Board (Class III Director)
Other Executive Officers:			
George E. Ponticas	43		Vice President - Finance, Secretary, Treasurer and Chief Financial Officer

Board Committees

The Board has an Executive Committee, consisting of Mr. Wick, Dr. Pouring and Mr. Hyde, which meets on short notice when required during intervals between meetings of the full Board. The Executive Committee has authority to exercise all of the powers of the Board of Directors, subject to specific directions of the Board of Directors and subject to the limitations of the Maryland Corporation Law. The Executive Committee did not hold any meetings during 2002.

Due to the small total number of directors, the Board does not have separate 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.

Based on their education and business experience, Board members Mr. Lawrence H. Hyde and Mr. Charles C. McGettigan, both of whom have experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements, have been designated as an audit committee "financial expert" 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.

In performing the duties typically assigned to an audit committee, the entire Board of Directors has (1) reviewed and discussed the 2002 audited financial statements of the Corporation with management; (2) discussed with the independent accountants of the Corporation the independent accountants' judgments about the quality, not just the acceptability, of the Corporation'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 2002 audited financial statements be included in the December 31, 2002 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 Chairman of the Board, at the address of the Corporation, 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

Mr. Lawrence H. Hyde has been a director of the Company since September 1986, serving as Chairman of the Board from June 1987 to June 1993 and as President from October 1997 through September 2001. Mr. Hyde is a private investor with interests in a number of publicly and privately held companies. He spent the majority of his business career as an executive in the automotive industry, serving in various engineering, marketing, international, and chief executive capacities for AM General Company, American Motors Corporation and Ford Motor Co. Currently, Mr. Hyde also serves as a trustee of the American University in Cairo, where he is also chairman of the Karnak Equity Fund. Mr. Hyde is a graduate of Harvard College and Harvard Business School.

Mr. Charles C. McGettigan has been a director of the Company since February 1992. He was a founding partner in 1991 and is a general partner of Proactive Investment Managers, L.P., which is the general partner of Proactive Partners, L.P. In 1988 Mr. McGettigan co-founded McGettigan, Wick & Co., Inc., an investment banking firm, following a career as an executive with major investment banking firms, including Hambrecht & Quist, Inc. and Dillon, Read & Co. Inc. He currently serves on the Boards of Directors of Cuisine Solutions, Inc., Modtech, Inc., PMR Corporation, Tanknology - NDE Corporation, and Onsite Energy, Inc., of which he is the Chairman. Mr. McGettigan is a graduate of Georgetown University, and received his MBA in Finance from The Wharton School of the University of Pennsylvania.

Mr. Myron A. ("Mike") Wick, III, has been a director of the Company since November 1991 and was elected Chairman of the Board of Directors in June 1993. He was a founding partner in 1991 and is a general partner of Proactive Investment Managers, L.P., which is the general partner of Proactive Partners, L.P. In 1988 Mr. Wick co-founded McGettigan, Wick & Co., Inc., an investment banking firm. From 1985 to 1988 Mr. Wick was Chief Operating Officer of California Biotechnology, Inc. in Mountain View, California. He currently serves on the Boards of Directors of Modtech, Inc., StoryFirst Communications, Inc., and Tanknology - NDE Corporation. Mr. Wick received a B.A. degree from Yale University and an MBA from the Harvard Business School.

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. 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.

Section 16(A) Beneficial Ownership Reporting Compliance

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 2002 except as indicated below.

In August 2002 the Company was informed that certain members of the Proactive, et.al. Form 13D filing group of affiliated entities and individuals, beneficial owners of more than 10% of the Company's Common Stock, had failed to report to the Company, and failed to file Form 4s, covering the following sales of the Company's Common Stock in 2000 and 2001:

Period of Transactions	# of shares
June 2000 - September 2000	78,000
December 2000	6,000
November 2001	11,000

In late July 2002 and August 2002 pursuant to a Form 144 filing with the SEC dated July 23, 2002, Proactive, et.al. sold an additional 63,000 shares of the Company's Common Stock for which Form 4s were not timely filed. Two of the Company's directors, Mr. McGettigan and Mr. Wick, held beneficial ownership of the shares sold in July 2002 by virtue of their executive and ownership positions in Proactive, et.al. Form 4s covering these sales were not timely filed by Mr. McGettigan and Mr. Wick.

Based solely on its review of the copies of such reports received by it, the Company believes that Form 4s were eventually filed by Proactive, et.al., Mr. McGettigan and Mr. Wick to report all of the above-described transactions.

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

Annual compensation

Name and Position	Year	Salary Current	Salary Deferred	Accrued bonus	Long-term compensation # of options
Dr. Andrew A. Pouring	2002	$ 87,500 (1)	$ 37,500	$ 0	0 (3)
CEO & Chief Scientist	2001	87,500 (1)	37,500	10,000	35,000
	2000	87,500	37,500	10,000	35,000
Mr. George E. Ponticas	2002	$ 86,400 (2)	$ 9,600	$ 25,000	200,000
CFO & Secretary	2001	86,400 (2)	9,600	25,000	100,000
	2000	86,400	9,600	10,000	30,000

(1) Includes $79,933 for 2002 and $33,656 for 2001 which has not been paid as of December 31, 2002.
(2) Includes $53,171 for 2002 and $33,232 for 2001 which has not been paid as of December 31, 2002.
(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.

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%. Mr. Ponticas has been deferring 10% of his annual salary for the last several years. The conditions that would require repayment of deferred amounts have yet to occur. As of December 31, 2002, a total of $448,923 and $125,326 in deferred salary is owed to Dr. Pouring and Mr. Ponticas, respectively, that is payable under the conditions described above. The authorized full annual salaries for Dr. Pouring and Mr. Ponticas for each of the past three years were $125,000 and $96,000, respectively. Effective January 1, 2003, the authorized full annual salary for Mr. Ponticas was increased to $120,000 while the percentage deferral was increased to 25%.

During much of 2001 and through the third quarter of 2002, the Company operated under severe cash flow difficulties. At times during 2001 and 2002 the Company's officers voluntarily and at their own discretion deferred receipt of payment of significant portions of their current wages to reduce the Company's monthly cash requirements, although some of these amounts were repaid by the end of the year. With the generation of cash flow from revenues during the fourth quarter of 2002, some of these amounts were repaid by the end of the year. Since December 2002, Mr. Ponticas has been receiving his current wages, while Dr. Pouring continues to defer a significant portion of his current wages. Such wages payable to the Company's officers totaled $199,992 as of December 31, 2002 and are payable upon demand. Through March 31, 2003, Dr. Pouring had deferred an additional $9,255.

In December of each of the last three years, the Company awarded bonuses totaling $37,500 in 2002, $57,500 in 2001, and $30,000 in 2000, 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, 2002, $22,500 and $50,000 in accrued bonuses remained payable to Dr. Pouring and Mr. Ponticas, respectively.

The bonus awards and option grants in 2001 and 2002 to the Named Executives continued to increase to 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 arduous continuing conditions.

In order to avoid long-term financial commitments, the Company does not have 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	0 (1)	0%	n/a	n/a	n/a
Ponticas	200,000	41%	$.25	$.20	Nov. 17, 2012

(1) In November 2002 Dr. Pouring was granted a ten-year option to purchase 100,000 shares of Common Stock effective as of January 1, 2003. These options are exercisable at $.25 per share.

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

			Number of securities underlying unexercised options/SARs at December 31, 2002	Value of unexercised in-the-money options/SARs at December 31, 2002
Name	# of shares acquired on exercise	Value realized	Exercisable/ unexercisable	Exercisable/ unexercisable
Pouring:				

@ $.25	0	$0	126,250 / 8,750	$0/$0
@ $.50	0	$0	210,066 / 0	$0/$0
@ $.75	0	$0	25,000 / 0	$0/$0
Ponticas:				
@ $.25	0	$0	222,500 / 65,000	$0/$0
@ $.50	0	$0	205,000 / 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, 2002 market price of $.20 of the Company's publicly traded Common Stock.

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 21,592,669 shares of Common Stock and 1,540,001 shares of Preferred Stock issued and outstanding at December 31, 2002.

The following tables set forth as of December 31, 2002 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 shares owned	Rights to acquire shares (5)	Total shares beneficially owned		Percent of class
John H. Drewanz (2)	600,000	200,000	800,000		3.7
Lawrence H. Hyde	644,986	1,814,286	2,459,272		11.1
Charles C. McGettigan	1,351,618	1,814,285	3,165,903	(4)	13.5
George E. Ponticas	326,262	528,928	855,910		3.9
Andrew A. Pouring	853,239	455,244	1,308,483		5.7
Myron A. Wick, III	1,351,618	1,814,285	3,165,903	(4)	13.5
All directors & officers as a group (6 persons)	3,776,105	5,162,743	8,938,848		33.4
Herbert J. Mitschele, Jr. Far Hills, NJ	1,081,655	65,000	1,146,655		5.3
Proactive, et.al. (3) San Francisco, CA	2,574,064	2,928,570	5,502,634		22.4

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(1) The business address for each director and named executive officer is 23 Hudson Street, Annapolis, Maryland, 21401.

(2) Mr. Drewanz resigned as a director in March 2003.

(3) Includes shares beneficially owned directly and indirectly by Proactive Partners, L.P. and several affiliated entities and individuals ("Proactive et.al."), as reported in a Form 13D filing with the Securities and Exchange Commission.

(4) Includes 2,815,903 shares beneficially owned by Proactive et.al., which shares could be deemed to be beneficially owned by both Mr. McGettigan and Mr. Wick by virtue of their executive and ownership positions in Proactive et.al. Both individuals exercise shared voting and investment power with respect to such shares.

(5) See detail provided in the following table.

RIGHTS TO ACQUIRE SHARES

Name	Exercisable options	Exercisable (put)/ call (2)	Exercisable warrants	Preferred stock converted	Total rights to acquire shares
John H. Drewanz	125,000		75,000		200,000
Lawrence H. Hyde	600,000	1,214,286			1,814,286
Charles C. McGettigan (1)	350,000	(607,143)		2,071,428	1,814,285
George E. Ponticas	447,500		80,000	1,428	528,928
Andrew A. Pouring	361,316		92,500	1,428	455,244
Myron A. Wick, III (1)	350,000	(607,143)		2,071,428	1,814,285
All directors & officers as a group (6 persons)	2,233,816	607,143	247,500	2,074,284	5,162,743
Herbert J. Mitschele, Jr.			25,000	40,000	65,000
Proactive , et.al. (2) San Francisco, CA		(1,214,286)		4,142,856	2,928,570

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(1) Includes 1,526,785 shares beneficially owned by Proactive, et.al., which shares could be deemed to be beneficially owned by both Mr. McGettigan and Mr. Wick by virtue of their executive and ownership positions in Proactive, et.al. Both individuals exercise shared voting and investment power with respect to such shares.

(2) 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. Mr. McGettigan and Mr. Wick each has indirect beneficial ownership in 50% of the shares subject to these agreements.

ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

None.

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.
21	Subsidiaries of the Registrant: Sonex International, B.V. - The Netherlands; Sonex Engines, Inc. - Delaware (both are inactive).
23.a	Consent of Hausser + Taylor LLP.
23.b	Consent of C.L. Stewart & Company.
24	Power of Attorney - Incorporated by reference to the Company's Annual Report on Form 10-KSB for the year ended December 31, 1998

(b) Reports on Form 8-K.

During the fourth quarter of 2002, the Company filed the following Current Reports on Form 8-K:

On October 3, 2002, to disclose that it had been awarded a $744,246 contract for application of its heavy fuel engine technology.

On October 11, 2002, to disclose that it had issued an announcement to shareholders on its website on October 11, 2002 to report on the change in the Company's chairman of the board which occurred on October 9, 2002.

On October 11, 2002, to disclose that it had issued an announcement to shareholders on its website on October 10, 2002 to report on the

2002 Annual Meeting of Shareholders held October 9, 2002.

On December 9, 2002, to disclose that it had been awarded a $458,862 subcontract for application of its diesel engine emissions reduction technology.

On December 19, 2002, to disclose a change in independent accountants for the year ended December 31, 2002.

ITEM 14. 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 an evaluation date within 90 days prior to the filing date of this Annual Report on Form 10-KSB. 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.

Since the evaluation date referred to above, there have been no significant changes in the Company's internal controls or in other factors that could significantly affect such controls.

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, 2003 By: /s/ Andrew A. Pouring

Andrew A. Pouring
Principal Executive Officer

April 14, 2003 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, 2003 /s/ Andrew A. Pouring

Andrew A. Pouring
Vice Chairman of the Board of Directors

April 14, 2003 *

Myron A. Wick, III
Chairman of the Board of Directors

April 14, 2003 *

Lawrence H. Hyde
Director

April 14, 2003 *

Charles C. McGettigan
Director

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* Executed on behalf of these persons by George E. Ponticas, a duly appointed attorney-in-fact of each such person.

/s/ George E. Ponticas

George E. Ponticas, Attorney-In-Fact

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

CERTIFICATIONS

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") on Form 10-KSB for the year ending December 31, 2002.

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-14 and 15d-14) for the Company and have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the Company, including its consolidated subsidiaries, if any, is made known to us by others within those entities, particularly during the period in which this

annual report is being prepared;

b) evaluated the effectiveness of the Company 's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The Company's other certifying officer and I disclosed, based on our most recent evaluation, 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 controls which could adversely affect the Company 's ability to record, process, summarize and report financial data and have identified for the Company 's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls

6. The Company's other certifying officer and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: April 14, 2003

/s/ Andrew A. Pouring

Andrew A. Pouring
Chief Executive Officer

CERTIFICATIONS

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") on Form 10-KSB for the year ending December 31, 2002.

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-14 and 15d-14) for the Company and

have:

a) designed such disclosure controls and procedures to ensure that material information relating to the Company, including its consolidated subsidiaries, if any, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
b) evaluated the effectiveness of the Company 's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The Company's other certifying officer and I disclosed, based on our most recent evaluation, 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 controls which could adversely affect the Company 's ability to record, process, summarize and report financial data and have identified for the Company 's auditors any material weaknesses in internal controls; and
b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls

6. The Company's other certifying officer and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: April 14, 2003

/s/ George E. Ponticas

George E. Ponticas
Chief Financial Officer

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

In connection with the Annual Report of Sonex Research, Inc. (the "Company") on Form 10-KSB for the year ending December 31, 2002, 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.

/s/ Andrew A. Pouring	/s/ George E. Ponticas
Andrew A. Pouring	George E. Ponticas
Chief Executive Officer	Chief Financial Officer

April 14, 2003

EXHIBIT 23.a

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 March 21, 2003 appearing in this Form 10-KSB.

HAUSSER + TAYLOR LLP

Cleveland, Ohio

April 14, 2003

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, 2003