SONEX RESEARCH INC
Form 10KSB
April 15, 2002

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, 2001. 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 [X] 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. [X]

The number of shares outstanding of the Issuer's $.01 par value Common Stock as of March 31, 2002 was 21,572,669. The aggregate market value of voting stock held by non-affiliates of the Registrant was $2,462,418 as of March 31, 2002.

Revenues for the year ended December 31, 2001 were $245,291.

Documents Incorporated by Reference: None

SONEX RESEARCH, INC. 2001 FORM 10-KSB

ITEM 1. DESCRIPTION OF BUSINESS

OVERVIEW

Sonex Research, Inc. ("Sonex" or the "Company"), 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. 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 SCS technology for in-cylinder control of ignition and combustion is designed to

- increase fuel mileage of gasoline engines
- reduce emissions of diesel engines
- permit small gasoline engines to run on safer diesel-type heavy fuels

The SCS improves the combustion of fuel 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 changes only a single engine component while introducing no additional parts and is self-driven by the combustion process.

Sonex believes it can show the technical feasibility of achieving higher fuel economy standards while lowering emissions in a new class of DI gasoline engined vehicles without sacrificing weight and vehicle safety. In 2000 Sonex introduced its Stratified Charge Radical Ignition (SCRI) combustion technology, a new branch of the SCS which Sonex believes will enable practical application of an alternative combustion process known as homogeneous charge compression ignition (HCCI) that has the potential for lowering both emissions and fuel consumption. Unresolved issues with ignition have prevented practical implementation of HCCI to date. Sonex believes it has attained the control of ignition that will make HCCI viable for commercial application such that the SCRI piston design, with further development, can enable DI gasoline engined automobiles, currently sold only in markets outside the U.S. because of emissions problems, to become emissions compliant in the U.S. while maintaining their current fuel consumption advantages. In addition, the evolution of hybrid gasoline and electric powered vehicles would be accelerated since a major improvement in engine fuel mileage would provide opportunities for tradeoff of vehicle weight versus power.

SCS reductions of soot in diesel truck engines have been confirmed by an independent engine consulting firm. SCS diesel engine designs require very little engine modification, and should provide cost advantages over complex exhaust aftertreatment devices. Evidence to date indicates that the SCS is a significant new engine design variable, and that the synergy of the SCS in combination with exhaust gas recirculation can reduce aftertreatment measures and enable in-cylinder emissions reduction to meet future regulatory standards.

The SCS process for the conversion of reliable, lightweight, SI, two-stroke, gasoline engines to start and operate on diesel-type 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. Sonex HFEs achieve power and fuel consumption substantially equal to that of the stock gasoline engines. Potential applications of the SCS heavy fuel conversion process can be expanded to other military and commercial uses.

Sonex is 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 is a key to the commercial acceptance of the SCS technology in the form of revenue-generating license agreements for industrial production of SCS components.

As of March 31, 2002, the Company has three full-time employees, and engages the part-time services of a consultant who serves as its director of business development. The Company also engages the services of several other consultants as needed. The Company has never experienced a strike or work stoppage, and believes its relations with its employees are good.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Sections of this document, as well as all publicly disseminated material about Sonex Research, Inc. (the "Company"), contain information in the form of "forward-looking" statements within the meaning of the Private Securities Litigation Act of 1995 (the "Act"). 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.

RISK FACTORS

In order to obtain the benefits of the "safe harbor" provisions of the Act for any such 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.

- ability to generate cash flow from revenue or to secure financing necessary to fund future operations
- ability to demonstrate commercial viability of SCS technology
- ability to complete technology development and demonstration programs and execute licensing agreements that produce significant revenue
- ability to maintain and protect its patents
- ability to attract and retain skilled personnel

- changes in general economic conditions
- competition

Furthermore, since its inception in 1980, the Company has generated cumulative net losses in excess of $22 million, and is likely to incur quarterly operating losses for the foreseeable future. The business has not generated sufficient cash flow to fund operations without resorting to external sources of capital. 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.

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, 2002, there were 21,572,669 shares of Common Stock issued and outstanding, with an additional 10,005,879 shares reserved for future issuance as follows: 4,400,000 shares issuable upon the conversion of preferred stock; 4,553,379 shares issuable upon the exercise of options granted under the Company's Stock Option Plan; 992,500 shares issuable upon the exercise of warrants; and 60,000 issuable upon the conversion of notes payable.

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.

OVERVIEW OF SCS DESIGN MODIFICATIONS

The SCS technology for DI diesel 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. 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 as chemical reactors and are connected to the piston bowl by vents. The MCs produce highly active radical (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.

The SCS "Low Soot" design, 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 "Low Soot" design 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 produce and conserve intermediate and radical 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 research engine with no change in injection timing. Sonex has also demonstrated that the SCS technology can be transferred to a modern turbocharged, intercooled DI diesel engine.

SCS generated radical chemical species from a design similar to the "Low Soot" design are also being used at Sonex in relation to 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, because compression ignition does not require the use of a spark plug; however, the lack of a method for controlling the ignition point has prevented practical implementation of HCCI. Sonex believes it has attained the control of ignition that will make HCCI viable for commercial application by achieving radical assisted, four-stroke combustion to enable fully controllable compression ignition at low pressures as a function of

fuel injection timing, a mode Sonex refers to as Stratified Charge, Radical Ignition (SCRI). With SCRI, radical (chemical) species that enable ignition are created by interaction of the injected fuel spray with specially designed MCs 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 emissions and the fuel economy of a diesel engine. On a DI, single cylinder laboratory engine at Sonex, the SCRI reduced NOx emissions by 80% and smoke by 90% while maintaining fuel consumption, using diesel-type fuels.

The SCRI combustion chamber modifications 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. The SCRI process isolates free radicals 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. 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.

The SCS engine design modifications for heavy fuel operation in two-stroke engines consist of a machined cylinder head and combustion chamber insert integrated with a glow plug starting system. For engines that have the cylinder head and cylinder in one casting, the stock cylinder head is removed and the remaining cylinder casting is decked and machined for cylinder head screws. The SCS starting system consists of a heavy fuel vaporizer block positioned between the carburetor and cylinder.

PRIMARY SONEX INITIATIVES

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 sought funding from the federal government for further development of the SCS technologies. Some of these proposed projects are expected to achieve certain milestones that will be key to the commercial development of the SCRI process for automotive engines.

The next few paragraphs provide an overview of the primary opportunities, and are followed by detailed discussions of the progress achieved to date.

Gasoline engined vehicles: With its SCRI process, Sonex intends to show the technical feasibility of achieving higher fuel economy standards while lowering emissions in a new class of DI gasoline engined vehicles without sacrificing weight and vehicle safety. 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.

Initially, Sonex must transition the results achieved by its SCRI process using a single-cylinder laboratory engine on diesel-type fuels to gasoline. Preliminary work on gasoline at Sonex has demonstrated that the SCRI process does achieve the desired ignition and high rate of heat releases which are necessary to achieve improved fuel consumption and lower emissions. The first stage of this effort, expected to take at least six months, will establish feasibility and design parameters and must also take place on a single cylinder engine. The emphasis on this first phase will be to establish a knowledge base upon which a prototype engine can be designed in a second phase.

Immediately following the first stage, Sonex would be in a solid position to work with the auto industry on demonstration projects to transition SCRI to

multi-cylinder engines so gasoline can be burned effectively in eventual production engines of all sizes. Fortunately, demonstration projects with automotive manufacturers could provide results fairly quickly 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.

Truck diesel engines: Sonex has engaged in development and demonstration programs with various international truck diesel engine manufacturers. The SCS "Low Soot" piston design for the reduction of emissions require very little engine modification, and should provide cost advantages over complex exhaust aftertreatment devices.

Recently one the world's leading engine engineering and powertrain consulting firms, Ricardo Consulting Engineers of the U.K., confirmed the soot reduction capability of the SCS "Low Soot" design in a DI diesel engine used in medium-duty trucks. Ricardo will publish the findings in a technical paper to be presented at the Society of Automotive Engineers' May 2002 Fuels and Lubes Conference. Ricardo is currently introducing the SCS "Low Soot" design results to engine manufacturers and piston suppliers while Sonex continues its efforts in that regard.

Heavy fuel engines: The Company, in its laboratory and under contract with the U.S. military and defense contractors, also has applied a 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 standard military fuels (also referred to as "heavy fuels") 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. The requirement for a single military fuel is also a logistics issue, as the military seeks to minimize the number and complexity of fuels.

Sonex HFEs achieve power and fuel consumption substantially equal to that of the stock gasoline engines. The Company has performed HFE conversions for various sizes of small gasoline engines for UAVs, and expects to be awarded shortly one or more contracts from the U.S. Department of Defense (DoD) and or its prime contractors, although there can be no assurance. In addition, over the past few weeks the Company has been developing a relationship with a foreign UAV engine company and is optimistic of executing a contract in the near future for HFE conversion development.

Technology marketing partners: Sonex believes commercial acceptance of the SCS technology can be accelerated through the establishment of relationships with entities which possess technical development and marketing capabilities within the engine industry.

Improved fuel economy in gasoline engined automobiles

Fuel economy of vehicles sold in the U.S. is a matter of public law under the CAFE (Corporate Average Fuel Economy) legislation. For nearly 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 are part of the Senate's current debate on a broad national energy bill. The Senate Committee on Commerce, Transportation and Science, which held hearings regarding follow-on legislation to CAFE early in 2002, proposed 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.

On March 13, 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. Proposals to Congress would be expected within two years. The Levin-Bond Amendment also includes provisions for additional funding for development of advanced engine and emissions control systems, including those for gasoline-electric powered hybrid vehicles.

Sonex believes that, with further development, its SCS Stratified Charge Radical Ignition (SCRI), low compression ratio, combustion process for unthrottled operation can lead to gasoline engined vehicles that are 25% - 30% more fuel efficient than today's vehicles while still meeting U.S. emissions standards.

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 and suffer from added weight.

An alternative combustion process known as homogeneous charge compression ignition (HCCI) is being examined by the worldwide automotive industry because of its potential for lowering both emissions and fuel consumption; however, the lack of a method for controlling the ignition point has prevented practical implementation of HCCI. At the same time, spark ignited (SI), direct injected gasoline (GDI) engined, five-passenger, 2,700 lb. automobiles (similar in size to the Volvo S40 and Ford Focus) that deliver 53 mpg are being manufactured by Mitsubishi and sold in foreign markets. GDI engines operate on high air-fuel ratios. Direct injection (DI) 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.

On the basis of extensive SCRI work it has performed with diesel-type fuels (see "Reduced emissions in diesel engines" below), Sonex believes it has attained the

control of ignition that will make HCCI viable for commercial application in GDI 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.

Sonex believes that with further development using gasoline, SCRI 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. Sonex has provided input to the Department of Energy, the White House, and the recent Senate committee hearings on the synergy between a technologically feasible increase in fuel mileage through the paradigm-shifting SCRI combustion process and improved vehicle safety. Sonex expects to provide additional input to the Senate and DOT before the Energy Bill is finalized.

The anticipated passage of the Levin-Bond Amendment to the Senate Energy Bill will provide Sonex the time needed to continue SCRI technology maturation work for gasoline engines and submit to DOT compelling results that are responsive to the requirements of the Levin-Bond Amendment. Proposals for funding of these efforts have been made by Sonex to the government and industry, and resolution is expected in the near future. Preliminary work at Sonex on gasoline has demonstrated that the SCRI process does achieve the desired ignition and high rate of heat releases which are necessary to achieve improved fuel consumption and lower emissions.

In conclusion, Sonex believes it can show the technical feasibility of achieving higher fuel economy standards with the SCRI in conventional gasoline engined vehicles without sacrificing weight and vehicle safety. In addition, the evolution of U.S. produced hybrid powered vehicles would be accelerated since a major improvement in engine fuel mileage would provide opportunities for tradeoff of vehicle weight versus power.

Reduced emissions in diesel engines

Regulatory agencies worldwide continue to mandate increasingly more strict requirements for the reduction of allowable diesel truck emissions, specifically with respect to smoke/particulates and NOx. The use of costly electronic controls and ultra-high pressure injection systems, including the new "common rail" injection systems that are integral to the engine itself, may permit truck manufacturers to attain some of these reductions. High pressure injectors may reduce smoke/particulates, but they also increase NOx emissions while doing so. Manufacturers, therefore, may be able to eliminate equipment such as particulate traps, but they likely will need de-NOx catalytic converters, further retard of injection timing, and replenishment chemicals, leading to an increase in fuel consumption and additional maintenance, all at a significantly higher cost.

The SCS "Low Soot" design in a DI diesel truck engine has been shown to reduce soot up to 45% while maintaining fuel consumption.

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 the world's leading engine engineering and powertrain consulting firms, Ricardo Consulting Engineers Ltd, confirmed the soot reduction capability of the SCS "Low Soot" design. Ricardo reported that a DI diesel engine used in medium-duty trucks, operating with the SCS "Low Soot" piston at the best injection timings, emitted up to 45% less soot than the stock engine, with similar fuel consumption. Ricardo will publish the findings, plus additional results from their subsequent Computational Fluid Dynamics study of the combustion process, in a technical paper to be presented at the Society of Automotive Engineers' May 2002 Fuels and Lubes Conference.

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 given indication that it intends to proceed 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 be used with existing series production machinery.

Application of the SCS "Low Soot" design 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 far 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.

The SCS SCRI, low compression ratio, combustion process operating in a laboratory engine reduced NOx emissions by 80% and smoke by 90% while maintaining fuel consumption.

The SCS SCRI combustion process for control of ignition and combustion was developed 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 JP-5 military 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 NOx emissions by 80% and smoke by 90% 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 recently 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.

Sonex continues to seek funding to complete the transfer of the SCRI results achieved on the single- cylinder laboratory diesel engine to a modern, multi-cylinder, diesel engine. One opportunity lies in the follow-up to the work Sonex has performed for a small U.S. company that is developing a nitrogen enriched air (NEA) membrane technology, as an alternative to EGR, for the reduction of NOx emissions in diesel engines. Initial development of the NEA membrane technology has been funded by the Department of Energy (DOE). In March 2002 this company submitted a proposal to DOE for a follow-on development program to investigate the use of its NEA membrane technology in combination with the Sonex SCRI combustion process to achieve even greater NOx emissions reductions. Word from DOE on the proposal is not expected for several months.

For its part of the DOE program, Sonex has proposed using the state-of-the-art, multi-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) which has now ended. Sonex would use the engine to fully characterize SCRI with and without the NEA membrane. This program would provide SCRI data on a multi-cylinder diesel engine for presentation to any engine manufacturer.

Conversion of gasoline engines to run on safer diesel-type heavy fuels

A DoD directive requires 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 UAVs, all-terrain vehicles (ATVs), small boats, and other applications for which gasoline storage, transport and use are undesirable.

The SCS application for SI, two-stroke gasoline engines permits conversion to operation on less volatile diesel and other "heavy fuels" for use in UAVs and

other applications using small engines, as well as for use in larger two- and four-stroke engines.

Sonex, under contract with the U.S. military and defense contractors, has applied its proprietary patented starting system and modified combustion chamber to convert commercially available SI two- stroke gasoline engines used in UAVs to heavy fuel operation. 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 heavy fuel engines (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.

Sonex HFEs achieve power and fuel consumption substantially equal to that of the stock gasoline engines and provide dependable performance over the full engine operating range without "knocking", which has been a major shortcoming of other heavy fuel conversion technologies. Significantly, the SCS achieves gasoline-like performance with heavy fuels while maintaining the compression ratio and light weight of the gasoline engine.

The Company has found its SCS heavy fuel combustion technology to be scaleable in two-stroke engines with displacements ranging from 18cc (1hp) to 352cc (27hp). Sonex hasn't yet had the opportunity to convert a gasoline engine with a larger cylinder displacement to heavy fuel operation, but is confident that its SCS HFE technology is scaleable to cylinder displacements of 500cc and larger. Sonex also intends to develop an SCRI process for the heavy fuel conversion of SI four-stroke gasoline engines, although significant additional research and development remain to be done.

In SI two-stroke engines, the SCS enables the combustion of heavy fuels through design modification of the cylinder heads to achieve a radical-enhanced combustion process while still relying on the spark to initiate combustion. In four-stroke engines, the SCS enables the combustion of heavy fuels through design modification of the pistons to achieve spark-less radical ignition with direct injection.

Sonex believes its SCS heavy fuel technology can assist military customers in achieving compliance with the requirement for a single battlefield fuel by converting existing gasoline engines to operate on heavy fuel. The Sonex HFE technology can be applied as a retrofit to existing SI two- and four- stroke gasoline engines or during the engineering of a brand new engine design.

Sonex heavy fuel designs for two-stroke engines are desirable for applications where safety, light weight, low cost and the use of a single fuel are important. In addition to UAVs and ATVs, both of which have been used by U.S. forces in Afghanistan, other military applications include outboard engines, small watercraft used as targets, and generator sets. Sonex also sees potential for this technology in the commercial market for other applications such as pleasure boats for which a lightweight engine burning diesel fuel would eliminate the hazards of gasoline storage and use.

The primary 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 commerically available items that are powered by two-stroke gasoline engines.

In recent months the Company has been developing relationships with domestic and foreign defense contractors. Sonex anticipates receiving one or more contracts from the DoD and/or defense contractors in the near future for continued

development of its SCS heavy fuel application for UAVs and other military uses. Some of these proposed projects are also expected to achieve certain milestones that will be key to the commercial development of the SCRI process for automotive engines.

Technology marketing partners

In addition to the relationship with Ricardo, Sonex has been in exploratory discussions with another leading engine engineering and powertrain consulting firm regarding a formal arrangement for the technical development and marketing of the various SCS engine applications. Sonex believes that having such a partner experienced in dealing with the engine and automotive industries on state-of- the-art technological developments is a key to the commercial acceptance of the SCS technology.

ITEM 2. DESCRIPTION OF PROPERTY

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

ITEM 3. LEGAL PROCEEDINGS

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

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

No matters were submitted to a vote of security holders during the fourth quarter of 2001.

ITEM 5. MARKET FOR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

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 Company has never paid cash dividends on its Common Stock and does not expect to pay any cash dividends in the foreseeable future. The high and low market prices of the Common Stock for each quarterly period since January 1, 2000 were as follows:

Quarter ended:	High	Low
March 31, 2000	$.50	$.28
June 30, 2000	.47	.28
September 30, 2000	.44	.19
December 31, 2000	.24	.11
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

As of March 31, 2002, there were 21,212,669 shares issued and outstanding, with approximately 950 holders of record. The shares for approximately 2,800 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, 2002, a total of 10,005,879 shares reserved for future issuance as follows: 4,400,000 shares issuable upon the conversion of preferred stock; 4,553,379 shares issuable upon the exercise of options granted under the Company's Stock Option Plan; 992,500 shares issuable upon the exercise of warrants; and 60,000 issuable upon the conversion of notes payable.

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

ACCUMULATED LOSSES; SOURCES OF CAPITAL

Since its inception in 1980, the Company has generated cumulative net losses in excess of $22 million and is likely to incur quarterly operating losses for the foreseeable future. The business has not generated sufficient cash flow to fund operations without resorting to external sources of capital. 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.

Cash available at the beginning of 2001, combined with revenue from development and demonstration programs, met a significant portion of the Company's operating expenditure requirements for the year. Additional cash of $288,750 was provided during 2001 from three private placements of stock.

FINANCIAL POSITION AND LIQUIDITY

Sonex has been operating under cash flow difficulties for several months, having fallen behind in payments due to some vendors. Since the fall of 2001 the Company's officers have not received a majority of the cash compensation due them. In late December 2001 Sonex took steps to reduce further its monthly cash requirements by eliminating one full-time position in its shop and by

restructuring compensation arrangements with its part-time consultants. A second full-time position became vacant at the end of February 2002.

In a private placement 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 amounts payable 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. As of March 31, 2002, the Company had available cash and equivalents of approximately $28,000 and accounts receivable of approximately $26,000. Also at the end of March 2002, the Company received a purchase order of approximately $92,000 from a defense contractor for a four-month effort to develop a small heavy fuel engine for an experimental UAV.

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 through June 30, 2002. The Company's prospects beyond that date 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. If these objectives are not achieved, the Company will have to reduce the scope of its operations even further, primarily by laying off its remaining employees and, possibly, by abandoning its facility. These circumstances could lead to bankruptcy as well.

Prior to June 30, 2002, the Company will seek to secure additional anticipated revenue-generating contracts. Once such contracts are secured, the Company will supplement its workforce as needed with part-time personnel before defining and filling full-time positions. Sonex also intends to seek a commercial marketing partner experienced in dealing with the industry on state-of-the-art technological developments. In addition, the Company plans to engage the services of a professional investor relations firm to develop, implement and maintain an ongoing program to increase the investment community's awareness of Sonex activities.

ONGOING SALARY DEFERRALS BY OFFICERS AND EMPLOYEES

In order to help conserve the Company's limited cash resources, certain of the Company's employees 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 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.

RESULTS OF OPERATIONS

Condensed comparative results:

	2001	2000	1999
Total revenue	$ 245,291	$ 407,898	$ 324,386

Cost of revenue	117,486	228,587	100,857
Research and development (R&D) expenses	482,461	453,494	531,584
General and administrative (G&A) expenses	337,099	332,607	315,649
Total expenses	937,046	1,014,688	948,090
Net loss from operations	(691,755)	(606,790)	(623,804)
Gain on sale of marketable securities			43,508
Investment income	1,400	4,860	10,181
Net loss	$ (690,355)	$ (601,930)	$(570,115)

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. Total revenue decreased from 2000 to 2001 by $162,607, or 40%, as a slight increase in revenue from programs for truck diesel engine manufacturers was more than offset by substantially lower revenue from defense contracts. Total expenses decreased $77,642, or 8%, from 2000 to 2001, due primarily to the decrease in costs resulting from a decline in the total of funded contracts.

The net loss for 2000 was $31,815, or 6%, higher than the net loss for 1999. The net loss for 1999 was reduced in part by gains on the sale of marketable securities. Revenue increased from 1999 to 2000 by $83,612, or 26%, as higher revenue from military contracts more than offset a decline in revenue from programs for truck diesel engine manufacturers. Total expenses increased $66,598, or 7%, from 1999 to 2000, due to the increase in costs associated with the higher level of funded contracts and higher personnel costs.

Gains on the sale of marketable securities in 1999 represent the proceeds from the sale of the Company's holdings in the common stock of Digital Dictation, Inc. (acquired in 1998 by Medquist, Inc.), the corporation which in 1995 was merged with and into the Company's inactive former subsidiary, SonoChem, Inc. The Company liquidated most of this investment during 1998 when its value increased substantially. The balance of the investment was sold in 1999. Because the Company's basis for this investment was zero, all sales proceeds are recognized as gains. Overall, from 1996 through 1999, the Company realized gains (net proceeds) from the sale of these securities of $359,064.

Revenue and cost of revenue:

	2001	2000	1999
Defense revenue	$ 145,291	$ 337,898	$ 224,286
Commercial revenue	100,000	70,000	100,000
Total revenue	245,291	407,898	324,386
Cost of revenue	117,486	228,587	100,857

Changes in annual revenue are subject to the number of funded contracts received, and the timing of completion of those contracts. Commercial revenue earned in connection with the Company's DI diesel engine piston technology is

subject to the negotiated amount, if any, that an engine manufacturer is willing to provide in funding to offset the development costs incurred by the Company in applying its technology to one of the manufacturer's engines. Over the past few years the Company has also obtained several government contracts for its heavy fuel engine (HFE) technology. All contracts to date in this area have involved the conversion of commercial gasoline fueled engines used in unmanned aerial vehicles (UAVs) and the like to heavy fuel operation.

Comparison of 2001 to 2000

Total revenue decreased $162,607, or 40%, from 2000 to 2001, with defense revenue declining by $192,607, or 57%, from 2000. Defense 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 the fall of 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.

Comparison of 2000 to 1999

The increase in total revenue from 1999 to 2000 resulted primarily from an increase in defense revenue of $113,612, or 51%. Approximately $124,000 of the defense revenue reported for 1999 related to the Navy sub-contract mentioned above, while another approximately $100,000 related to a contract from the U.S. Naval Research Laboratory for heavy fuel engine conversion demonstration for a UAV engine.

Revenue from commercial contracts declined $30,000 from 1999 to 2000. All of the revenue for 1999 was earned in connection with the test program for the Company's SCS "Low Soot" design mentioned above.

Cost of revenue primarily consists of direct labor charges, direct purchases attributable to funded programs, and consulting fees. Such costs 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.

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 individual manufacturers based

upon the level of effort required and the level of funding, if any, that each manufacturer has been willing to commit. Nor is there any process by which to estimate the amount and number of defense contracts which the Company may be awarded. 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.

Research and development (R&D) expenses:

	2001	2000	1999
Personnel:			
Employee compensation	$ 335,605	$ 333,027	$ 314,442
Taxes & benefits	54,730	48,594	42,761
Consulting fees	64,587	115,672	106,277
Total personnel	454,922	497,293	463,480
Project parts and supplies	28,116	49,343	44,810
Occupancy	47,591	48,785	47,044
Depreciation, patent amortization and write-off of abandoned patents	52,326	62,409	51,493
Patent maintenance and renewal fees	7,243	8,831	9,962
Other expenses	9,749	15,420	15,652
Total R&D expenses	599,947	682,081	632,441
Less amounts classified as cost of revenue:			
Personnel	(112,873)	(192,330)	(96,719)
Project parts and supplies	(3,598)	(32,951)	(4,138)
Other expenses	(1,015)	(3,306)	
Total R&D	$ 482,461	$ 453,494	$ 531,584

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 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 the decrease in funded contracts.

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 (related only to the Navy contract) decreased from $55,968 in 2000 to zero in 2001 as a result of the contract's ending 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 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.)

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. 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 $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. Such write-offs represent 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 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.

Comparison of 2000 to 1999

From 1999 to 2000 total R&D expenses increased by $49,640, or 8%, as a result of increases in personnel costs and non-cash charges for depreciation, patent amortization and patent write-offs. The increase in personnel costs of $33,813, or 7%, from 1999 to 2000 resulted from higher total employee compensation and an increase in consulting fees. Employee compensation increased $18,585, or 6%, from 1999 to 2000 due to the hiring early in 2000 of a technician who was employed until October 2000, a 4% increase in the salary of the Company's CEO and Chief Scientist, an increase in health insurance premium rates, while total

bonus awards declined slightly, from $22,000 in 1999 to $20,000 in 2000. As described above, payment of bonuses is to be deferred until the Company's cash resources are sufficient. Payroll taxes and employee benefits in total increased $5,833, or 14%, from 1999 to 2000, due to an increase in health insurance premiums.

While consulting fees in total increased only $9,395, or 9%, from 1999 to 2000, total fees for funded contracts (related only to the Navy contract) increased from $15,000 in 1999 to $55,968 in 2000 to reflect the increase in time spent by the consultant who served as program manager, as well as the charges for a fuel injection system consultant. This was offset significantly by a decrease from $90,562 in 1999 to $59,704 in 2000 in total charges for the Company's R&D supervisor and international corporate liaison 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. During 1999 he spent a considerable amount of time in Annapolis and therefore was paid 100% compensation in cash for his time in Annapolis, while in 2000 he made no trips to Annapolis and thus was paid part-time compensation in stock for almost the entire year. The Company recorded charges of $50,664 in 2000 and $43,365 in 1999 in connection with the issuance of stock as compensation to this consultant.

The amount of personnel costs charged to cost of revenue in 2000 was nearly double that for 1999, as a much higher percentage of the workforce was devoted to funded projects in 2000 as opposed to 1999, as well as the fact that nearly $56,000 in consulting fees were charged to Navy project in 2000 versus only $15,000 in 1999.

Project parts and supplies expense increased only slightly from 1999 to 2000; however, a significantly higher percentage of the total expenditures in 2000 were related to funded projects, reflecting the fact that personnel spent more of their time on funded projects in 2000 versus 1999.

Occupancy expenses, primarily rent, increased slightly as an increase in the monthly rent as of March 2000 was partially offset by lower charges for utilities.

Total depreciation, patent amortization, and patent write-offs increased by $10,916, or 21%, from 1999 to 2000. The largest component is patent write-offs, which were higher by $12,514, from $25,555 in 1999 versus $38,069 in 2000.

General and administrative (G&A) expenses:

	2001	2000	1999
Personnel (includes stock and options):			
Employee compensation	$ 125,557	$ 113,564	$ 103,296
Consulting fees	79,186	80,836	71,115
Amortization of deferred compensation from grant of stock options	29,761	29,764	29,760
Taxes & benefits	10,352	9,560	9,374
Total personnel	244,856	233,724	213,545
Occupancy	10,882	11,727	11,406
Travel	1,882	6,113	13,550
Proxy solicitation & annual meeting	19,618	19,545	18,021
Legal fees	5,264	8,873	2,069

Audit fees	9,450	9,150	8,580
Stock transfer agent fees	8,496	8,743	9,027
Other expenses	35,131	34,732	39,451
Total G&A	$ 337,099	$ 332,607	$ 315,649

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 travel costs. 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, as well as expenses, by the individual who serves as the Company's director of business development increased from $60,836 in 2000 to $69,186 in 2001. The Company has a contract with this consultant for a minimum amount of services per month, half of which amount is paid in cash and half is paid in stock options. During 2001, services in excess of the monthly minimum were required on occasion, all of which extra charges were paid in stock options. These extra charges amounted to $18,120 in 2001 and $10,250 in 2000. (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.) Consulting fees also include amounts payable to the former president of the Company, who was engaged on a part-time basis, under a consulting agreement that provided for payments of $5,000 per quarter. The arrangement was terminated by mutual agreement effective June 30, 2001, such that only $10,000 in fees was charged 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.

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.

Occupancy expenses, primarily rent, decreased slightly as an increase in the monthly rent as of March 2000 was partially offset by higher sublease income in 2000 versus 2001. 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. The Company also subleases a portion of its driveway and parking lot, with such income being recorded as an offset to G&A rent expense.

Travel costs decreased by $4,231, or 69%, from 2000 to 2001. The Company's former president, who lives in New England, made fewer trips to Annapolis in 2001 as opposed to 2000 to help conserve cash expenditures.

Comparison of 2000 to 1999

Total G&A expenses increased by $16,958, or 5%, from 1999 to 2000, primarily due to an increase in personnel costs, while an increase in legal fees was offset by reductions in travel and other expenses. The increase in personnel costs of $20,179, or 9%, from 1999 to 2000 resulted from higher salary expense due to a 4% increase in the salary of the Company's CFO in January 2000, the award of a larger bonus to the CFO in 2000 versus 1999, and an increase in consulting fees relating almost entirely to increased services by the individual who serves as the Company's director of business development. The Company has a contract with this consultant for a minimum amount of services per month, half of which amount is paid in cash and half is paid in stock options. During 2000 services in excess of the monthly minimum were required on occasion, all of which extra charges of $10,250 were paid in stock options. Consulting fees in each of 2000 and 1999 also include $20,000 payable annually to the former president of the Company, who resigned from that position in Septmber 2001.

Adoption of new accounting pronouncements

The adoption by the Company in fiscal 2002 of new accounting pronouncements which have a delayed effective date is not expected to have a material impact on its financial statements.

ITEM 7. FINANCIAL STATEMENTS

Index to financial statements:

REPORT OF INDEPENDENT ACCOUNTANTS

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

We have audited the accompanying balance sheets of Sonex Research, Inc. (the "Company") as of December 31, 2001 and 2000, and the related statements of operations and accumulated deficit and cash flows for each of the three years ended December 31, 2001, 2000 and 1999, 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 generally accepted auditing standards. 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 2000, and the results of its operations and its cash flows for each of the three years ended December 31, 2001, 2000 and 1999, respectively, in conformity with generally accepted accounting principles.

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, 2001	December 31, 2000
Assets		
Current assets		
Cash and equivalents	$ 3,355	$ 89,306
Accounts receivable	37,828	17,340
Prepaid expenses	25,783	27,142
Loans to officers and employees (Note 4)	22,500	22,500
Total current assets	89,466	156,288
Notes receivable from officers and employees (Note 5)	18,125	18,125
Patents (Note 6)	204,088	215,707
Property and equipment, (Note 7)	57,249	69,026
Total assets	$ 368,928	$ 459,146
Liabilities and Stockholders' Equity/(Deficit)		
Current liabilities		
Accounts payable and other accrued liabilities	$ 46,923	$ 41,775
Accrued compensation and benefits (Note 8)	221,228	97,807
Total current liabilities	268,151	139,582
Deferred compensation (Note 9)	857,944	810,844
Stockholders' equity/(deficit)		
Preferred stock, $.01 par value, 2,000,000 shares issued,1,540,001 shares outstanding	15,400	15,400
Common stock, $.01 par value - shares issued and outstanding: 21,212,669 in 2001 and 19,479,868 in 2000	212,127	194,799
Additional paid-in capital	21,334,577	20,927,437
Accumulated deficit	(22,319,271)	(21,628,916)
Total stockholders' equity/(deficit)	(757,167)	(491,280)
Commitments (Note 14)		
Total liabilities and stockholders' equity/(deficit)	$ 368,928	$ 459,146

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

SONEX RESEARCH, INC.
STATEMENTS OF OPERATIONS AND ACCUMULATED DEFICIT

	Year ended December 31,		
	2001	2000	1999
Revenue			
Defense	$ 145,291	$ 337,898	$ 224,286
Commercial	100,000	70,000	100,000
	245,291	407,898	324,286
Costs and expenses			
Cost of revenue	117,486	228,587	100,857
Research and development	482,461	453,494	531,584
General and administrative	337,099	332,607	315,649
	937,046	1,014,688	948,090
Net loss from operations	(691,755)	(606,790)	(623,804)
Other income			
Investment income	1,400	4,860	10,181
Gains on sales of marketable securities			43,508
Net loss	(690,355)	(601,930)	(570,115)
Accumulated deficit			
Beginning of period	(21,628,916)	(21,026,986)	(20,456,871)
End of period	$(22,319,271)	$(21,628,916)	$(21,026,986)
Weighted average number of common shares outstanding	20,224,090	18,472,727	17,765,110
Net loss per share	$ (.03)	$ (.03)	$ (.03)

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

SONEX RESEARCH, INC.
STATEMENTS OF PAID-IN CAPITAL

	Price per share	Preferred stock ($.01 par value) Shares	Amount	Common stock ($.01 par value) Shares	Amount	Additional paid-in capital
Balance, January 1, 1999		1,540,001	15,400	17,642,860	176,429	20,209,503

March for services	.44			20,975	210	9,098
June for services	.46			17,925	179	8,071
September for services	.38			36,923	369	13,593
December for services	.32			36,803	368	11,478
April and December option exercises	.50			255,000	2,550	124,950
Correction of stock ledger				(2,317)	(23)	23
Stock option compensation						24,000
Amortization of deferred compensation from stock options						29,760
Balance, December 31, 1999		1,540,001	15,400	18,008,169	180,082	20,430,476
Feb. warrants exercised	.35			285,000	2,850	96,900
March for services	.40			24,130	241	10,125
June warrants exercised	.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 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 stock options						29,761
Balance, December 31, 2001		1,540,001	$15,400	21,212,669	$212,127	$21,334,577

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

SONEX RESEARCH, INC.
STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2001	2000	1999
Cash flows from operating activities:			
Net loss	$(690,355)	$(601,930)	$(570,115)
Adjustments to reconcile net loss to net			

cash used in operating activities			
Depreciation	15,441	16,328	13,573
Amortization of patents	36,885	46,091	37,920
Amortization of deferred compensation from stock options	29,761	29,764	29,760
Current charges paid in stock or options	95,957	96,539	67,366
Gain on sale of marketable securities			(43,508)
(Increase) decrease in accounts receivable	(20,488)	60,121	25,024
(Increase) decrease in prepaid expenses	1,359	2,694	(999)
Increase (decrease) in accrued liabilities	128,569	10,989	13,680
Increase (decrease) in deferred compensation	47,100	47,100	49,706
Net cash used in operating activities	(355,771)	(292,304)	(377,593)
Cash flows from investing activities:			
Proceeds from sale of marketable securities			43,508
(Increase) decrease in loans to employees			5,000
Acquisition of property and equipment	(3,664)	(1,386)	(63,009)
Additions to patents and technology	(25,266)	(42,022)	(14,096)
Net cash provided by (used in) investing activities	(28,930)	(43,408)	(28,597)
Cash flows from financing activities:			
Issuance of stock - private placements	288,750	193,750	
Issuance of stock - exercise of warrants		173,500	
Issuance of stock - exercise of options			127,500
Forgiveness of accounts payable		10,000	
Net cash provided by financing activities	298,750	367,250	127,500
Increase (decrease) in cash	(85,951)	31,538	(278,690)
Cash at beginning of period	89,306	57,768	336,458
Cash at end of period	$ 3,355	$ 89,306	$ 57,768

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

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 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. 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.

Development contracts are executed for funding supplied by a United States Government (the "Government") agency or defense 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 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.

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 generally accepted accounting principles 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.

NOTE 3 - LIQUIDITY

Management recognizes that the Company's history of operating losses, level of available funds, and revenue from current and future development 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 continued deferral by its officers of portions of their salaries.

In a private placement 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 amounts payable 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. As of March 31, 2002, the Company had available cash and equivalents of approximately $28,000 and accounts receivable of approximately $26,000. Also at the end of March 2002, the Company received a purchase order of approximately $92,000 from a defense contractor for a four-month effort to develop a small heavy fuel engine for an experimental UAV.

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 through June 30, 2002. The Company's prospects beyond that date 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.

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, 2002.

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 11), 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 accruing on the notes at 6% per annum will be waived if the entire principal amount is paid on or before June 30, 2002.

NOTE 6 - PATENTS

The net unamortized capitalized costs of patents is comprised of the following:

	December 31,	
	2001	2000
Capitalized costs	$ 251,243	$ 255,307
Accumulated amortization	(47,155)	(39,600)
	$ 204,088	$ 215,707

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 $23,253 in 2001, $38,069 in 2000 and $25,555 in 1999 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,	
	2001	2000
Shop equipment	$ 460,821	$ 457,545
Office equipment	36,900	36,512
	497,721	494,057
Accumulated depreciation	(440,472)	(425,031)
	$ 57,249	$ 69,026

NOTE 8 - ACCRUED COMPENSATION AND BENEFITS

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

	December 31,	
	2001	2000
Accrued vacation pay	$ 58,000	$ 53,000
Accrued bonuses	83,000	38,000
Accrued wages	80,228	6,807

	$ 221,228	$ 97,807

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 9. The amount of accrued vacation included above that was payable to the Company's officers at December 31, 2001 and 2000 was $41,406 and $39,938, respectively.

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. In December 2001, the Company awarded bonuses totaling $57,500, including an aggregate of $50,000 to its two officers. During 2001 and 2000, the Company paid $12,500 and $17,000, respectively, of the bonuses accrued as of the previous year-end.

Beginning in the first quarter of 2001, the Company's officers have 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. Such wages payable to the Company's officers totaling $66,888 are included in the total of accrued wages as of December 31, 2001. Through March 31,2002, the officers have deferred an additional $46,822. 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 9.

NOTE 9 - DEFERRED COMPENSATION

In order to help conserve the Company's limited cash resources, the Company's officers and certain of 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. By written agreement with the Company, these individuals 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,	
	2001	2000
Current officers	$ 525,337	$ 478,237
Current employees and consultants	62,088	62,088
Former officers and other employees	270,519	270,519
	$ 857,944	$ 810,844

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, 2002. 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 10 - INCOME TAXES

The Company has not incurred any federal or state income taxes since its inception due to operating losses. At December 31, 2001, the Company had net operating loss ("NOL") carryforwards of approximately $14.2 million available to offset future taxable income. Net operating losses generated in 1998 and subsequent years may be carried forward twenty years, while such losses generated in 1997 and prior years may be carried forward fifteen years. If certain substantial changes in the Company's ownership should occur, there would be an annual limitation on the amount of the carryforwards which can be utilized. 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:

	NOL's	Capital
Year of expiration:		
2002	$ 1,837,965	$ 133,400
2003	1,344,816	365,147
2004	1,185,181	14,970
2005	900,267	
2006 - 2012	7,095,459	
2018 - 2021	1,842,038	
	$ 14,205,726	$ 513,517

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 $5.5 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 $4,781,634 have expired unused, as have capital loss carryforwards of $201,681.

NOTE 11 - 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, 2001, 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.

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 12 - STOCK OPTIONS

The Company maintains a non-qualified stock option plan (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 2011.

Between January 1, 1999 and December 31, 2001, 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, 1999	3,856,716	$.52	3,391,966	$.52
Granted	556,000	.50		
Exercised	(255,000)	.50		
Lapsed or canceled	(101,000)	.50		
Unexercised at December 31, 1999	4,056,716	$.52	3,426,716	$.52
Granted	272,500	.39		
Exercised	0			
Lapsed or canceled	(6,000)	.50		
Unexercised at December 31, 2000	4,323,216	$.51	3,760,716	$.52
Granted	882,500	.25		
Exercised	0			
Lapsed or canceled	(671,400)	.50		
Unexercised at December 31, 2001	4,534,316	$.49	3,919,316	$.46

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.

Options granted under the Plan during 1999 include grants of ten-year options in June 1999 to the Company's chief financial officer, exercisable 50% on the date of grant and 50% one year later, to purchase 100,000 shares of common stock, and in September 1999 to the Company's former president, exercisable 25% per year beginning with the date of grant, to purchase 250,000 shares of common stock. These options granted in 1999 all have an exercise price of $.50 per share, which price was above the market price of the common stock at each 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 1999 through 2001 in connection with options granted under the Plan. Since late in 1998, the Company has engaged a consultant to serve as director of business development and project manager who is 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 consultant's services which are payable by such stock options. Such charges aggregated $42,120 in 2001, $45,875 in 2000, and $24,000 in 1999, 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, $29,764 in 2000, and $29,760 in 1999, 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, has 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-Sholes option pricing model with the following weighted average assumptions: volatility factor of 150%, risk-free interest rate of 2%, zero dividend yield, and expected term of ten 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:

	2001	2000	1999
Weighted average fair value per share	$.19	$.37	$.36
Net loss - as reported	$690,355	$601,930	$570,115
Net loss - pro forma	$1,019,970	$926,125	$861,650
Net loss per share - as reported	$.03	$.03	$.03
Net loss per share - pro forma	$.05	$.05	$.05

The increase of $329,615 from the reported net loss to the pro forma net loss for 2001 associated with the charges for the estmated fair value of options consists of $84,321 for options granted in 2001 and $245,295 for options granted in prior years.

The Black-Sholes valuation model were 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 Sholes 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 13 - COMMON STOCK RESERVED FOR FUTURE ISSUANCE

As of December 31, 2001, a total of 11,664,591 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 April 2006	175,000
Exercisable at $.50 per share, expiring in March 2006	250,000
Exercisable at $.50 per share, expiring in December 2005	387,500
Exercisable at $.75 per share, expiring in	
February 2002	167,759
March 2002	220,000
	1,200,259
Currently exercisable options:	
Exercisable at $.25 per share	471,550
Exercisable at $.50 per share	3,201,766
Exercisable at $.75 per share	196,000
Exercisable at $1.00 per share	50,000
	3,919,316
Granted options becoming exercisable in the future:	

Exercisable at $.25 per share	56,250
Exercisable at $.50 per share	88,750
	615,000
Options available for future grants	1,530,016
Conversion of preferred stock	4,400,000
Total shares reserved	11,664,591

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.

NOTE 14 - 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 2001, $47,000 in 2000 and $42,000 in 1999, while the Company also earned sublease income of $3,000, $2,400, and $2,400 in 2001, 2000 and 1999, 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

The Company has had no disagreements with its current independent accountants, C.L. Stewart & Company, on any matter of accounting principles or practices or financial statement disclosure. C.L. Stewart & Company has been the Company's independent accountants since October 31, 1997.

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 2002, 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. Following the resignation of three Preferred Stock directors and one Common Stock director in July 1997, the total number of directors was set at five, consisting of two Preferred Stock directors and three Common Stock directors. At the time of these changes in the membership of the Board of Directors, the Preferred stockholders waived their right to fill the vacancies created by the resignations of the three Preferred Stock Directors. The Preferred Stockholders continued to waive their right to elect a majority of the total number of directors through December 3, 2001.

At the 2001 Annual Meeting of Shareholders held September 27, 2001, the Company announced the retirement of Mr. Lawrence H. Hyde as its president, although Mr. Hyde remains a member of the Board. The Company also announced that Mr. John H. Drewanz would be joining the Board in October 2001, while Mr. Nuno Brandolini, a director of the Company since 1982, agreed to resign his position as a Class II Common Stock director to create a vacancy for Mr. Drewanz. Because he was elected by the Board to fill a vacancy, Mr. Drewanz's term will expire at the next annual meeting of shareholders. At that time, Mr. Drewanz, or such other person as may be validly nominated to fill the vacancy, shall be elected by the shareholders to serve the remaining scheduled term as a Class II director or until his successor is elected and qualified.

With respect to the position of president, the Company announced that there were no immediate plans to name a replacement because the position has been part-time given the focus of the Company on research. The Company will seek to fill the position if and when potentially significant business and financial transactions require more attention such that the position of president will become prominent.

After giving consideration to the changes in the Board of Directors announced at the 2001 Annual Meeting, the Preferred stockholders again asserted their right to elect a majority of the total number of directors. Additionally, the Board took steps to make the three classes of directors once again as nearly equal in number as possible as specified in the Company's Charter. As a result, the Board of Directors took the following actions effective as of December 4, 2001:

- Re-affirmed the number of directors currently is set at five, to consist of three Preferred Stock directors and two Common Stock directors;

- Decreased the number of Class I directors from three to two and increased the number of Class II directors from one to two; and

- Accepted the resignation of Mr. Hyde from his position as a Class I Common Stock director and then elected him as a Class II Preferred Stock director

Because he was elected by the Board to fill a vacancy, Mr. Hyde's term will expire at the next annual meeting of shareholders. At that time, Mr. Hyde, or such other person as may be validly nominated to fill the vacancy, shall be elected by the shareholders 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 (1)	Position
Preferred Stock Directors:			
Lawrence H. Hyde	77	2002	Class II Director
Charles C. McGettigan	57	2002	Class II Director
Myron A. Wick, III	58	2002	Chairman of the Board (Class I Director)
Common Stock Directors:			
John H. Drewanz	62	2002	Class II Director
Andrew A. Pouring	70	2004	Chief Executive Officer, Chief Scientist and Vice Chairman of the Board (Class III Director)
Other Executive Officers:			
George E. Ponticas	42		Vice President - Finance, Secretary, Treasurer and Chief Financial Officer

(1) The terms of the Class II directors normally expire in 2003; however, because the current Class II directors were elected by the Board to fill vacancies rather than having been elected by the shareholders, their terms will expire at the next annual meeting of shareholders.

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.

Mr. John H. Drewanz was named to the Board of Directors in October 2001. Mr. Drewanz is a private investor who spent thirty years as a college professor at the University of Maryland, University of Baltimore, American University and Anne Arundel (Maryland) Community College. Mr. Drewanz also owned his own real estate firm and has developed many properties in the Baltimore and Annapolis vicinity. He received an MBA from the Harvard Business School and a law degree from the University of Maryland. Mr. Drewanz is also a Certified Public Accountant.

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.

ITEM 10. EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by the Company to its executive officers 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		
	Salary	Accrued	Long-term compensation

Name and Position	Year	In cash	Deferred	bonus	# of options
Dr. Andrew A. Pouring	2001	$ 87,500(1)	$ 37,500	$ 25,000	100,000
CEO & Chief Scientist	2000	87,500	37,500	10,000	35,000
	1999	84,000	36,000	7,500	35,000
Mr. George E. Ponticas	2001	$ 86,400 1)	$ 9,600	$ 25,000	100,000
CFO & Secretary	2000	86,400	9,600	10,000	30,000
	1999	82,800	9,200	6,000	125,000

(1) Includes $33,656 for Dr. Pouring and $33,232 for Mr. Ponticas of current wages for which payment has been deferred voluntarily and at their own discretion in order to help the Company conserve its limited cash resources.

The authorized full annual salaries for Dr. Pouring and Mr. Ponticas were increased in January 2000 from $120,000 to $125,000 and from $92,000 to $96,000, respectively, representing the first increase since January 1997.

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 agreement with the Company, these individuals and other current and former employees 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.

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, 2001, a total of $409,980 and $115,357 in deferred salary is owed to Dr. Pouring and Mr. Ponticas, respectively, that is payablee under the conditions described above.

Beginning in the first quarter of 2001, the Company's officers have 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. The amount and timing of payment of these unpaid wages will be determined at the discretion of the Company's officers, as these accrued wages are not subject to the terms for the repayment of ongoing salary deferrals as described above. Such unpaid wages due to the Company's two officers totaled $66,888 as of December 31, 2001. Through March 31,2002, the officers have deferred an additional $46,822.

In December of each of the last three years, the Company awarded bonuses totaling $57,500 in 2001, $30,000 in 2000, and $25,000 in 1999, to its officers and employees, including the amounts reported above for the Named Executives. The bonus awards in both years 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. As of December 31, 2001, $32,500 and $35,000 in accrued bonuses remained payable to Dr. Pouring and Mr. Ponticas, respectively.

The December 2001 bonus awards and option grants to the Named Executives were higher than in the previous year to reflect the fact in 2001 these individuals 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 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	100,000	41%	$.25	$.17	Dec. 11, 2011
Ponticas	100,000	41%	$.25	$.17	Dec. 11, 2011

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

Name	# of shares acquired on exercise	Value realized	Number of securities underlying unexercised options/SARs at December 31, 2001 Exercisable/ unexercisable	Value of unexercised in-the-money options/SARs at December 31, 2001 Exercisable/ unexercisable
Pouring:				
Exercisable @ $.25		$0	67,500 / 67,500	$0/$0
Exercisable @ $.50		$0	211,316 / 8,750	$0/$0
Exercisable @ $.75		$0	25,000 / 0	$0/$0
Ponticas:				
Exercisable @ $.25		$0	65,000 / 65,000	$0/$0
Exercisable @ $.50		$0	218,750 / 6,250	$0/$0
Exercisable @ $.75		$0	20,000 / 0	$0/$0

The exercise price of all options held by the Named Executives was higher than the December 31, 2000 market price of $.17 of the Company's publicly traded common stock.

ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth as of March 31, 2002 information relating to beneficial ownership 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 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 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	Total shares beneficially owned	Percent of class
John H. Drewanz	600,000	195,000	795,000	3.7
Lawrence H. Hyde	644,986	1,665,786	2,310,772	10.4
Charles C. McGettigan	1,383,118	1,915,785	3,298,903 (3)	14.0
George E. Ponticas	326,262	383,750	710,012	3.2
Andrew A. Pouring	853,239	396,316	1,249,555	5.7
Myron A. Wick, III	1,383,118	1,915,785	3,298,903 (3)	14.0
All directors & officers as a group (6 persons)	3,807,605	4,945,637	8,753,242	33.0
Herbert J. Mitschele, Jr. Far Hills, NJ	1,051,655	92,857	1,144,512	5.3
Proactive, et.al. (2) San Francisco, CA	2,732,064	3,053,570	5,785,634	23.5

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

(2) 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.

(3) Includes 2,909,903 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.

Rights to Acquire Shares

Name	Exercisable options	Exercisable (put)/ call (2)	Exercisable warrants	Preferred stock converted	Total rights to acquire shares
John H. Drewanz	100,000		95,000		195,000
Lawrence H. Hyde	576,500	1,089,286			1,665,786
Charles C. McGettigan (1)	389,000	(544,643)		2,071,428	,915,785
George E. Ponticas	303,750		80,000		383,750
Andrew A. Pouring	303,816		92,500		396,316
Myron A. Wick, III (1)	389,000	(544,643)		2,071,428	1,915,785
All directors & officers as a group (6 persons)	2,062,066	544,643	267,500	2,071,428	4,945,637
Herbert J. Mitschele, Jr.			50,000	42,857	92,857
Proactive , et.al. (2) San Francisco, CA		(1,089,286)		4,142,856	3,053,570

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(1) Includes 1,581,379 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 subsidiaries).
23.a	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.
27	Financial Data Schedule

(b) Reports on Form 8-K.

None.

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 15, 2002 By: /s/ Andrew A. Pouring

Andrew A. Pouring
Principal Executive Officer

April 15, 2002 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 15, 2002 *

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

April 15, 2002 *

John H. Drewanz
Director

April 15, 2002 /s/ Andrew A. Pouring

Andrew A. Pouring
Vice Chairman of the Board of Directors

April 15, 2002 *

Lawrence H. Hyde
Director

April 15, 2002 *

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.

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 April 10, 2002 appearing on page 25 of this Form 10-KSB.

/s/C.L. STEWART & COMPANY

Annapolis, Maryland
April 10, 2002