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SONEX RESEARCH INC  
Form 8-K  
April 23, 2003

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT  
Pursuant to Section 13 or 15(d) of the Securities  
Exchange Act of 1934

Date of Report (Date of earliest event reported): April 23, 2003

SONEX RESEARCH, INC.  
(Exact name of registrant as specified in Charter)

Maryland	0-14465	52-1188993
(State or other	(Commision file	(IRS employer
jurisdiction of	number)	identification no.)
incorporation)		

23 Hudson Street, Annapolis, MD 21401  
(Address of principal executive offices)

(410) 266-5556  
(Registrant's telephone number, including area code)

N/A  
(Former name or former address, if changed since last report)

ITEM 5. - OTHER EVENTS AND REGULATION FD DISCLOSURE

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On April 23, 2003, Sonex Research, Inc. (the "Company") posted the following update to shareholders on its website ([www.sonexresearch.com](http://www.sonexresearch.com)):

SONEX UPDATE - APRIL 23, 2003

Dear Fellow Shareholders:

Last week Sonex filed its December 31, 2002 Annual Report on Form 10-KSB with the SEC. This report provides a comprehensive, up-to-date discussion of the Company's initiatives and includes complete audited financial statements. The Form 10-KSB will be mailed to shareholders later this year along with other proxy information in connection with our 2003 Annual Meeting of Shareholders. The date for the shareholder meeting will be determined in the near future.

The complete Annual Report on Form 10-KSB as filed with the SEC is available at <http://www.sec.gov/Archives/edgar/data/723312/000072331203000003/r10ksb02.txt>. This version is in plain text format and does not contain most standard document formatting features. You can request a formatted version from Sonex directly, either in electronic format or in hard copy.

You will read in the Annual Report on Form 10-KSB that Sonex reported revenues for 2002 of \$471,912, up from \$245,291 in 2001, as the Company received three major contracts and subcontracts from branches of the U.S. government and military or their prime contractors during the second half of 2002; there were no revenues in 2002 from commercial contracts. The increase in revenues combined with a decrease in total expenses led to a decline in the net loss, which fell to \$321,640 in 2002 from \$690,355 in 2001, a reduction of 53%.

The new contracts and subcontracts, as described in brief below, provided the cash needed to fund the majority of the Company's operating expenditure requirements for 2002. Expenditures were kept to a minimum through staff reductions early in the year and the continued deferral of compensation by officers and key consultants. In the second half of 2002 the Company expanded its staff to handle the work brought on by the new funded programs. In 2003 revenues from these continuing projects and anticipated new contracts are again expected, although there can be no assurance, to provide most of the cash necessary to fund operations for the year. As of March 31, 2003, the Company had approximately \$110,000 cash and accounts receivable of approximately \$95,000.

The Company's three ongoing funded programs are as follows.

In the fourth quarter of 2002 the Company was awarded a \$744,246 contract by the Defense Advanced Research Projects Agency (DARPA) to begin the design and development of a heavy fuel conversion process for a gasoline automotive engine for potential use in a developmental unmanned aerial vehicle (UAV). The primary objective of this program is to transfer the SCS SCRI heavy fuel design achieved in the Sonex single-cylinder laboratory engine to a modern six-cylinder, gasoline automotive engine, eliminate the spark ignition system, and produce the same power the engine originally produced on gasoline. As of March 2003, Sonex has completed a design review with DARPA and is progressing to engineer the hardware for the SCS conversion. Suppliers have been engaged and are responsive to this project. Completion of this project is expected in late 2003 or early 2004.

In the fourth quarter of 2002 the Company received a subcontract from Compact Membrane Systems, Inc. (CMS) for \$458,862, of which \$100,000 is cost-shared (funded) by Sonex. CMS is a prime contractor for a U.S. Department of Energy (DOE), Small Business Innovation Research (SBIR) Program, Phase II project. Sonex and CMS are evaluating the diesel engine emissions reduction potential of

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combining the patented piston-based, SCS technology and the CMS polymer membrane technology for the addition of nitrogen enriched air (NEA) to the combustion process. Last week Sonex announced it had recently taken delivery of the advanced research automotive diesel engine to be used for the testing. The engine, which is DOE property, is a state-of-the-art, three-cylinder, direct injected, turbo-charged, automotive diesel engine developed by a major international vehicle manufacturer in the joint U.S. government and automotive industry funded PNGV (Partnership for a New Generation Vehicle) program.

Early stages of the Phase II project will focus on the emissions reduction capabilities of the SCS pistons separately, while subsequent testing in combination with the NEA membrane will demonstrate the viability for commercialization of the synergy of SCS configurations and the CMS membranes. This program would provide SCS in-cylinder emissions reduction data on a multi-cylinder diesel engine as a means for diesel engine manufacturers to evaluate the potential for SCS designs, alone and in combination with the NEA membrane, to reduce the cost and complexity of future exhaust aftertreatment systems. While the entire project is not expected to be completed until 2004, testing results on the SCS pistons alone may be available later this year.

In the third quarter of 2002 the Company received a subcontract, initially funded for \$200,000 and later increased to \$281,947, from Science Applications International Corporation (SAIC), a large Department of Defense prime contractor. Sonex was tasked to conduct a survey of commercially available two-stroke, spark ignited, gasoline engines of approximately 72 horsepower and, jointly with SAIC, select a candidate engine for a "best efforts" SCS conversion to start and operate on heavy fuels for use in a UAV weapon system. SAIC also awarded a subcontract to a competing firm to develop a heavy fuel conversion for a rotary engine already in production. SAIC and its military sponsor subsequently increased the targeted horsepower requirement to 100. Sonex and SAIC together selected a candidate gasoline engine, not yet in production, for conversion to heavy fuel. Due to deficiencies found in operating the candidate engine on gasoline and concurrent fuel consumption problems experienced by the competing rotary engine operating on heavy fuel, the military sponsor recently expressed a desire to have Sonex work with the competing rotary engine developer to focus on improving the fuel consumption of the rotary heavy fuel engine. This joint effort is expected to be formalized during the second quarter of 2003.

In 2003 Sonex is pursuing a number of business development, marketing, and financing initiatives. Development efforts taking place under the current government contracts could facilitate participation by the engine and automotive industries and thereby accelerate commercialization potential of the patented SCS technology. In particular, outcomes from the DARPA program should validate the SCS SCRI technology for in-cylinder control of ignition and combustion that could be applied later to a gasoline powered version.

Sonex will keep you informed of new developments in these ongoing projects and others the Company is pursuing. Management looks forward to seeing many of you again at the 2003 Annual Meeting of Shareholders later this year.

Sincerely,

Andrew A. Pouring, D.Eng.  
Chief Executive Officer  
Sonex Research, Inc.

### ABOUT SONEX

Sonex Research, Inc., a leader in the field of combustion technology, is

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developing its patented Sonex Combustion System (SCS) piston-based technology for in-cylinder control of ignition and combustion, designed to increase fuel mileage and reduce emissions of internal combustion engines. Sonex plans to complete development, commercialize and market its SCS Stratified Charge Radical Ignition (SCRI) combustion process to the automotive industry in response to forthcoming increases in national vehicle fuel mileage standards. Presently, high mileage, roomy and safe five-passenger automobiles using gasoline, direct injected (GDI) engines are sold only in Japan and Europe due to high emissions. Sonex intends to conclusively demonstrate that SCS-SCRI will enable GDI engined vehicles to achieve 50 mpg (highway) while meeting emissions standards to permit sale in the U.S. as a viable, near-term alternative to longer-term solutions such as improvements in hybrid propulsion systems or years of further R&D required for fuel cell technology to become practical.

Additionally, independent third-party testing has confirmed the potential of the SCS application for DI diesel engines to reduce harmful soot in-cylinder without increasing fuel consumption. Sonex is pursuing joint marketing and commercialization programs for the SCS low soot technology with committed industrial partners.

Other SCS designs are being used to convert gasoline engines of various sizes to operate on safer, diesel-type "heavy fuels" for use in military and commercial applications requiring light weight and safe handling and storage of fuel. Examples include UAVs (unmanned aerial vehicles) and ATVs (all-terrain vehicles) such as those used by U.S. defense forces in Afghanistan, as well as outboard engines, small watercraft used as targets, and generator sets.

### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

"Forward-looking" statements contained in this announcement, as well as all publicly disseminated material about the Company, are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Act. Such statements are based on current expectations, estimates, projections and assumptions by management with respect to matters such as commercial acceptance of the SCS technology, the impact of competition, and the Company's financial condition or results of operations. Readers are cautioned that such statements are not guarantees of future performance and involve risks and uncertainties that could cause actual results to differ materially from those expressed in any such forward-looking statements. Additional information regarding the risks faced by Sonex is provided in the Company's periodic filings with the Securities and Exchange Commission under the heading "Risk Factors". Such filings are available upon request from the Company or online in the EDGAR database at [www.sec.gov](http://www.sec.gov).

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### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

April 23, 2003

SONEX RESEARCH, INC.  
Registrant

/s/ George E. Ponticas

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George E. Ponticas  
Chief Financial Officer