SONEX RESEARCH INC Form 10QSB November 18, 2002

> U.S. SECURITIES AND EXCHANGE COMMISSION Washington, D. C. 20549

> > FORM 10-QSB

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

For the quarterly period ended September 30, 2002

SONEX RESEARCH, INC.

Incorporated in the State of Maryland 23 Hudson Street Annapolis, Maryland 21401

Telephone Number: (410) 266-5556 IRS Employer Identification No. 52-1188993

Commission file number 0-14465

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 []

There were 21,592,669 shares of the Issuer's \$.01 par value Common Stock outstanding at November 18, 2002.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (Unaudited)

#### REPORT OF INDEPENDENT ACCOUNTANTS

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

We have reviewed the condensed financial statements appearing in this Form 10-QSB Quarterly Report of Sonex Research, Inc. (the "Company") as of September 30, 2002. These financial statements are the responsibility of the Company's management.

We conducted our review in accordance with standards established by the American Institute of Certified Public Accountants. A review of interim financial information consists principally of applying analytical procedures to financial data and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with generally accepted auditing standards, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying financial statements for them to be in conformity with generally accepted accounting principles.

We previously audited, in accordance with generally accepted auditing standards, the balance sheet as of December 31, 2000, and the related statements of operations and accumulated deficit and cash flows for the year then ended (the "audited financial statements", not presented herein), and in our report dated March 30, 2001, we expressed an unqualified opinion on those financial statements. We also stated that the audited financial statements were prepared assuming that the Company will continue as a going concern; however, as described in Note 3 to the audited financial statements, the Company has incurred significant net losses since its inception and its ability to commence generation of significant revenue and ultimately achieve profitable operations raise substantial doubt about the Company's ability to continue as a going concern. The audited financial statements that might result from the outcome of this uncertainty.

C. L. STEWART & COMPANY

Annapolis, Maryland November 13, 2002

> SONEX RESEARCH, INC. CONDENSED BALANCE SHEETS (Unaudited)

> > September 30, December 31, 2002 2001

ASSETS

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- 3 3					

Current assets			
Cash and equivalents	\$		\$ 3,355
Accounts receivable		28,989	
Prepaid expenses		22,938	
Loans to officers and employees		22,500	22,500
Total current assets		119,652	89,466
Notes receivable from officers and employees		20,572	18,125
Patents and technology, net of accumulated			
amortization of \$59,155 in 2002 and			
\$44,638 in 2001		204,962	204,088
Property and equipment, net of accumulated depreciation of \$451,872 in 2002 and			
\$434,031 in 2001		54,901	57,249
¥131,031 III 2001			
Total assets			\$    368,928
LIABILITIES AND STOCKHOLDERS' EQUITY/(DEFICIT)			
Current liabilities			
Accounts payable and other accrued liabilities	\$	59 <b>,</b> 696	\$ 46,923
Note payable to shareholder			30,632
Convertible note to shareholder		6,184	
Accrued compensation and benefits		356,745	221,228
Total current liabilities			268,151
Deferred compensation			857,944
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: 21,592,669 in 2002 and			
21,212,669 in 2001		215 027	212,127
Additional paid-in capital	2		21,334,577
Accumulated deficit			(22,319,271)
ACCUMUTATED GETTETE	(2		
Total stockholders' equity/(deficit)		(947,345)	(757,167)
Commitments (Note 10)			
Total liabilities and stockholders' equity		•	\$ 368,928

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

SONEX RESEARCH, INC.. CONDENSED STATEMENTS OF OPERATIONS AND ACCUMULATED DEFICIT (Unaudited)

	 Three mon Septem 2002	 	 Nine mont Septem 2002	-	
Revenue Defense/government	\$ 120,308	\$ 79 <b>,</b> 936	\$ 206,825	\$	113 <b>,</b> 710

Commercial		50,000		100,000
	120,308	129 <b>,</b> 936	206,825	213,710
Costs and expenses Cost of revenue Research and development General and administrative	66,671	44,552 100,083 84,390	195,765	374,852
		229,025		672,480
Net loss from operations		99,089		
Investment and other income	(274)	(116)	(2,457)	(1,278)
Net loss	72,729	98 <b>,</b> 973	270,303	457,492
Accumulated deficit				
Beginning	22,516,845	21,987,435	22,319,271	21,628,916
End		\$22,086,408		
Weighted average number of shares outstanding		20,342,731		
Net loss per share		\$.005 =====		

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

## SONEX RESEARCH, INC. CONDENSED STATEMENTS OF PAID-IN CAPITAL

## (Unaudited)

	Price per share	Preferred stock (\$.01 par value) Shares Amount	(\$.01 par		Additional paid-in capital
Balance, January 1, 2000 February exercise of		1,540,001\$15,400	18,008,1695	\$180 <b>,</b> 082	\$20,430,476
warrants	.35		285,000	2,850	96,900
March for services	.40		24,130	241	10,125
June exercise of warrants	.37	5	196,667	1,967	71,783

	.25 .25	5		31,538 56,877	483 315 569 7,750 542	12,695 13,181 186,000	
Balance, December 31, 2000		1,540,001	15,400	19,479,868	194,799	20,927,437	
March private placement March for services April private placement June private placement June for services August payment of stock subscription September for services October private placement December for services	.25 .25 .20 .29 .20			54,577 125,000 325,000 44,916 25,000 55,000 750,000	3,000 546 1,250 3,250 449 250 550 7,500 533	13,099 30,000 61,750 12,667 4,750 13,200 105,000	
December forgiveness of payables Stock option compensation Amortization of deferred compensation from grant of stock options						10,000 42,120	29 <b>,</b> 761
Balance, December 31, 2001		1,540,001	15,400	21,212,669	212,127	21,334,577	

(continued on next page)

## SONEX RESEARCH, INC. CONDENSED STATEMENTS OF PAID-IN CAPITAL

## (Unaudited)

Price	Preferred	d stock	Common s	stock	Additional
per	(\$.01 par	value)	(\$.01 par	value)	paid-in
share	Shares	Amount	Shares	Amount	capital

## (continued from previous page)

Balance, January 1, 2002	1,540,001\$15,400	21,212,669\$212,127	\$21,334,577	
March private placement	.15	360,000 3,600	50,400	
May for services	.25	12,000	120	2,880
July for services	.25	8,000	80	1,920
Stock option compensation			21,125	

Balance,	Sept.	30,	2002	1,540,	001\$	15 <b>,</b> 4	100	21,592	6695	\$215,927	\$21	,410,	902

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

## SONEX RESEARCH, INC. CONDENSED STATEMENTS OF CASH FLOWS (Unaudited)

	Nine months ended September 30,				
		2002		2001	
Cash flows from operating activities					
Net loss loss \$	(2	70,303)	\$	(457,492)	
Adjustments to reconcile net loss to					
net cash used in operating activities					
Depreciation			1	1,400	13,500
Amortization of patents		14,407		37,853	
Amortization of deferred compensation					
from grant of stock options				22,321	
Current charges paid in stock or options		26,125		69,380	
Accrued interest on notes receivable from employees		(2,447)			
(Increase) decrease in accounts receivable		8,839		(67,596)	
(Increase) decrease in prepaid expenses		2,844		(814)	
Increase (decrease) in accrued liabilities	1	48,291		107,245	
Increase (decrease) in deferred compensation		36,231		36,230	
Net cash used in operating activities	(	24,613)		(239,373)	

			-
Cash flows from investing activities Acquisition of property and equipment Additions to patents		) (1, (22, 01	1)
Net cash used in investing activities		(23,99	
Cash flows from financing activities Issuance of convertible note Issuance of note payable to shareholder	30,632	6,184	
Issuance of stock - private placement	,	54,000 	176,250
Net cash provided by financing activities	90,816	176 <b>,</b> 25	0
Increase (decrease) in cash		41,870	(87,119)
Cash Beginning of period		3,355	89,306
End of period	\$ 4	45,225 \$	2,187
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The accompanying notes are an integral part of the financial statements.

## SONEX RESEARCH, INC. NOTES TO CONDENSED FINANCIAL STATEMENTS (Unaudited)

#### 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 - PRESENTATION OF FINANCIAL STATEMENTS

The accompanying unaudited condensed financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-QSB and Item 310(b) of Regulation S-B. Accordingly, these financial statements do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included.

Operating results for the three- and nine-month periods ended September 30, 2002

are not necessarily indicative of the results that may be expected for the year ending December 31, 2002. For further information, reference is made to the financial statements and notes thereto included in the Company's Annual Report on Form 10-KSB for the year ended December 31, 2001.

## NOTE 3 - LIQUIDITY

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

As described in Note 11, the Company was awarded a \$744,246 contract in October 2002 from the Department of Defense (DoD), with the first milestone payment of approximately \$154,000 expected to be received by the end of November 2002. Revenues from this and a previous contract from a DoD prime contractor are expected to provide sufficient cash to fund the Company's operating requirements for the next several months.

Since early 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 \$188,664 are included in the total of accrued wages as of September 30, 2002 in the accompanying unaudited balance sheet. The continued deferral of portions of current wages by the Company's officers is expected to end in December 2002; however, wages accrued to date are payable upon demand. 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 7.

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 at least through June 30, 2003. The Company's prospects beyond that time are dependent upon its ability to enter into significant funded contracts for the further development of its SCS technology, establish joint ventures or strategic partnerships with major industrial concerns, or secure a major capital infusion. There is no assurance that the Company will be able to achieve these objectives. In October 2002 the Company engaged the services of a local venture capital consultant to assist in the recruiting of qualified personnel and/or firms to supplement the Company's management capabilities and position itself to consider viable strategic opportunities.

#### NOTE 4 - 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.

NOTE 5 - NOTES PAYABLE TO SHAREHOLDER

In connection with a private placement in March 2002 as detailed in Note 9, the Company issued a note, initially payable on June 30, 2002, that is convertible to equity at the option of the holder. The due date of the note was first extended to September 30, 2002, and has since been extended to January 31, 2003. The note has an interest rate of 6%, with a total of \$184 in interest having accrued through September 30, 2002.

In late July 2002 upon award of a \$200,000 military subcontract, the Company obtained a \$30,000 loan from this same shareholder, with repayment secured by revenues from the subcontract. The note, which is payable on January 31, 2003, has an interest rate of 8%, with a total of \$632 in interest having accrued through September 30, 2002.

#### NOTE 6 - ACCRUED COMPENSATION AND BENEFITS

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

	Sep	tember 30, 2002	December 31, 2001		
Accrued wages Accrued consulting fees Accrued bonuses Accrued vacation pay	\$	217,126 27,345 55,000 57,274	\$	70,536 9,692 83,000 58,000	
	\$ ====	356 <b>,</b> 745	\$ ====	221,228	

Since early 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 \$188,664 are included in the total of accrued wages as of September 30, 2002. The continued deferral of portions of current wages by the Company's officers is expected to end in December 2002; however, wages accrued to date are payable upon demand. The amount and timing of such payments will be determined at the discretion of the Company's written agreement with current and former employees to defer payment of portions of their salaries as described in Note 7. Similar arrangements exist for consulting fees, the majority of which amounts are payable to the individual who serves as the Company's director of business development on a part-time basis.

In December of each of the last three years, the Company awarded bonuses to its officers and employees with the stipulation that payment of such bonuses is to be deferred until the Board of Directors determines that the Company's cash resources are sufficient to enable such payments. During 2001 the Company paid \$12,500 of the bonuses accrued as of the previous year-end, portions of which payments represented the conversion of accrued bonuses to equity. In connection with a private placement in March 2002 as detailed in Note 9, the Company paid \$22,500 of accrued bonuses through the conversion of such amounts to equity.

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 7. The amount of accrued

vacation included above that was payable to the Company's officers at September 30, 2002 and December 31, 2001 was \$42,245 and \$41,406, respectively.

#### NOTE 7 - 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:

	September 30, 2002		December 31, 2001	
Current officers Current employees and consultants Former officers and other employees	\$	561,568 62,088 270,519	\$	525,337 62,088 270,519
	\$ ====	894,175	\$ ====	857,944

The conditions that would require repayment of deferred amounts have yet to occur, and it is unlikely that such conditions will occur prior to September 30, 2003. Accordingly, such deferred compensation is reported separately in the accompanying balance sheet as a non-current liability.

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

## NOTE 8 - 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 and capital loss carryforwards of approximately \$14.2 million available to offset future taxable income. 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. Since 1995 net operating loss carryforwards aggregating \$4,781,634 have expired unused, as have capital loss carryforwards of \$201,681. Net operating loss carryforwards of approximately \$133,000 are scheduled to expire at the end of 2002.

#### NOTE 9 - STOCKHOLDERS' EQUITY

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 September 30, 2002, a total of 459,999 shares of preferred stock had been converted into 1,314,278 shares of common stock.

#### Private placements of common equity

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

The offer and sale of these shares of common stock and warrants to purchase shares of common stock 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.

#### 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 September 2012.

The Company accounts for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25. Under APB No. 25, compensation cost is measured as the excess, if any, of the quoted market price of the Company's stock at the date of grant over the exercise price of the option granted. Compensation cost for stock options, if any, is recognized ratably over the vesting period. In its complete annual financial statements presented in its Form 10-KSB, the Company provides additional pro forma disclosures as required under Statement of Financial Accounting Standards No. 123 - "Accounting for Stock-Based Compensation" as if the fair value based method of accounting had been applied to the Company's stock option grants.

From January 1, 2002 through September 30, 2002, the Company had the following activity in options to purchase shares of common stock under the Plan:

Weighted	Weighted					
		# of shares	average exercise price 	<pre># of     shares exercisable</pre>	average exercise price 	
Unexercised at January 1,	2002	4,534,316	\$.46	3,919,316	\$.49	
Granted Becoming exercisable Exercised			211,56	.25	306 <b>,</b> 562	.30
Lapsed		(539,750) 	.50	(508,500) 	.50	
Unexercised at Sept. 30,	2002	4,206,128	\$.45 ====	3,717,378	\$.47 ====	

Common stock reserved for future issuance

At September 30, 2002, a total of 11,516,832 shares of common stock were reserved by the Company for issuance for the following purposes:

Purpose	<pre># of shares</pre>	
Currently exercisable warrants expiring in		
December 2005, exercisable at \$.50 per share	387,500	
March 2006, exercisable at \$.50 per share	250,000	
April 2006, exercisable at \$.50 per share	175,000	
March 2007, exercisable at \$.25 per share	180,000	
	992,500	
Currently exercisable options	3,717,378	
Granted options becoming exercisable in the future	488,750	
Options available for future grants	1,858,204	
Conversion of note payable	60,000	
Conversion of preferred stock	4,400,000	
Total shares reserved	11,516,832	

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#### NOTE 10 - 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. The Company will seek to negotiate a new long-term lease for its facility or search for an alternative location in the event that a long-term 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.

#### NOTE 11 - SUBSEQUENT EVENTS

In October 2002 the Company was awarded a \$744,246 contract from 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 an experimental helicopter-type unmanned aerial vehicle (UAV). The first milestone payment from DARPA of approximately \$154,000 is expected to be received by the end of November 2002.

# ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS

#### Caution regarding forward-looking statements

Sonex Research, Inc. (the "Company" or "Sonex"), 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
- o ability to demonstrate commercial viability of its technology
- ability to complete technology development and demonstration programs and execute licensing agreements that produce significant revenue
- o ability to maintain and protect its patents
- o ability to attract and retain skilled personnel
- o changes in general economic conditions
- o 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 November 14, 2002, there were 21,592,669 shares of Common Stock issued and outstanding, with an additional 11,516,832 shares reserved for future issuance as follows: 4,400,000 shares issuable upon the conversion of preferred stock; 6,064,332 shares issuable 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.

#### Overview of the Company and its technology

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  $% \left( {{{\left[ {{{C_{\rm{s}}}} \right]}_{\rm{cons}}}} \right)$ 

- o increase fuel mileage of gasoline engines
- o reduce emissions of diesel engines
- o 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.

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

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

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 EGR 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. Currently, contracts to Sonex from the U.S. Department of Defense (DoD) and its prime contractors involve development efforts that should provide definitive conclusions as to the commercial viability of the patented SCS technology for in-cylinder control of ignition and combustion.

As of November 18, 2002, the Company has seven full-time employees and one-part-time employee, and engages the part-time services of a consultant who serves as its director of business development and manager of government programs. The Company also engages the services of several other consultants as needed. The Company has never experienced a strike or work stoppage, and believes its relations with its employees are good.

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 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.

The next few paragraphs provide an overview of the primary opportunities for Sonex. Additional detailed information can be found in the Company's December 31, 2001 Annual Report on Form 10-KSB.

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 published the findings in a technical paper 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 own 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 UAVs. The military now requires such engines to operate on less volatile heavy fuels to reduce the hazard associated with gasoline, making 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 is now working on the conversion of larger gasoline engines.

In late July 2002 the Company was awarded initial funding of \$200,000 under a subcontract from Science Applications International Corporation (SAIC) of San Diego, to begin the conversion of a commercially available gasoline engine of approximately 75 horsepower to start and operate on heavy fuels for use in a UAV weapon system. SAIC, a leader in the development of advanced gun weapon systems including launchers and smart projectiles, is the DoD prime contractor for LEWK (Loitering Electronic Warfare Killer), a joint program endorsed and funded by the Air Force, Navy, Army, and Marine Corps. The objective of the LEWK program, an Advanced Concept Technology Demonstration (ACTD), is to develop and demonstrate the military utility of a low cost flying "truck", or loitering UAV, system with a 200-pound payload, capable of providing several hours of continuous EW jamming and loitering "on-demand" warhead delivery.

In October 2002 the Company was awarded a \$744,246 contract from the Defense Advanced Research Projects Agency (DARPA) to begin the design and development of an HFE conversion process for a gasoline automotive engine for potential use in the A160 Hummingbird, an experimental helicopter-type UAV under development as part of the joint DARPA/Army Future Combat Systems (FCS) program. The contract

program with DARPA will focus on the SCRI process to convert an existing SI, four-stroke, gasoline engine to heavy fuel operation.

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. 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.

#### Financial position and liquidity

As of September 30, 2002, the Company had available cash and equivalents of \$45,225 and accounts receivable of \$28,989 related to the subcontract awarded in late July 2002 by SAIC, which amounts were collected during October 2002. The first milestone payment from the October 2002 DARPA conract of approximately \$154,000 is expected to be received by the end of November 2002. With the receipt of the SAIC and DARPA contracts, the Company has supplemented its workforce by hiring additonal full-time and part-time personnel. Revenue from these two contracts, performance on which will extend well into 2003, is expected to provide sufficient cash to fund the Company's operating requirements for the next several months.

Since early 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 \$188,664 are included in the total of accrued wages as of September 30, 2002 in the accompanying unaudited financial statements. The continued deferral of portions of current wages by the Company's officers is expected to end in December 2002; however, wages accrued to date are payable upon demand. 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 7 to the accompanying unaudited financial statements.

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 at least through June 30, 2003. The Company's prospects beyond that time are dependent upon its ability to enter into significant funded contracts for the further development of its SCS technology, establish joint ventures or strategic partnerships with major industrial concerns, or secure a major capital infusion. There is no assurance that the Company will be able to achieve these objectives. In October 2002 the Company engaged the services of a local venture capital consultant to assist in the recruiting of qualified personnel and/or firms to supplement the Company's management capabilities and position itself to consider viable strategic opportunities.

## Results of operations

A net loss of \$270,303 was recorded for the first nine months of 2002, as compared to \$457,492 for the corresponding period in 2001, a decrease of \$187,189, or 41%. The decrease in the loss was due primarily to substantially lower personnel costs in 2002 versus 2001, resulting from a reduction in the workforce.

Revenue and cost of revenue:

		Nine mon Septem			
		2002		2001	
Defense/government revenue Commercial revenue	\$	206,825	\$	113,710 100,000	
	\$	206,825	\$	213,710	
	==		==		
Cost of revenue	\$	78,821	\$	65 <b>,</b> 976	
	==		==		

Defense/government contracts relate to the Company's technology for conversion of commercial gasoline fueled engines used in UAVs and the like to heavy fuel operation. Such revenue increased by \$93,115 from 2001 to 2002, primarily as a result of the receipt in late July 2002 of the SAIC contract for the LEWK UAV. Revenue from this contract recognized during the third quarter of 2002 totaled \$105,133.

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 partially offset the development costs incurred by the Company in applying its technology to one of the manufacturer's engines. All of the commercial revenue for 2001 was recognized in connection with a development and demonstration program with a foreign diesel engine manufacturer for the Sonex SCRI application. In 2002 the manufacturer declined to continue with the program.

Cost of revenue primarily consists of direct labor charges and direct purchases attributable to funded programs.

#### Research and development (R&D) expenses:

R&D expenses for the first nine months of the year decreased by \$179,087, or 48%, from \$374,852 in 2001 to \$195,765 in 2002, almost entirely due to lower personnel costs. Net R&D personnel costs, after reclassification of amounts charged to cost of revenue, decreased by \$137,483, or 53%, from \$257,249 in 2001 to \$119,766 in 2002. Amounts charged to cost of revenue were \$61,130 in 2001 and \$63,613 in 2002, resulting in total R&D personnel costs before reclassification of \$318,379 in 2001 and \$183,379 in 2002, a decrease of \$135,000, or 42%.

The decrease in overall R&D personnel costs resulted from a reduction in the workforce, including consultants, which was placed in effect late in 2001 and continued into the first quarter of 2002. Salaries and wages decreased by \$80,882, and payroll taxes and benefits decreased by \$19,118. The Company discontinued its consulting agreement at the end of 2001 with the individual residing in Europe who served as R&D Supervisor and International Liaison Officer. This individual was compensated in the form of restricted stock and cash, with related charges totaling \$47,974 in the first nine months of 2001. Charges for other consultants and temporary personnel increased \$12,974 from 2001 to 2002.

Another decrease of \$20,846 from the first nine months of 2001 to 2002 resulted from lower charges for the write-off of unamortized costs of patents abandoned, from \$23,253 in 2001 to \$2,407 in 2002. In addition, project parts and supplies,

which include engine parts and other items used or consumed in engine testing and in the machine shop that are not charged to cost of revenue, decreased \$14,379, from \$19,120 in the first nine months of 2001 to \$4,741 in 2002. Total depreciation and patent amortization decreased from \$28,100 in 2001 to \$23,400 in 2002, or \$4,700. Other expenses in total decreased by \$1,679 from 2001 to 2002.

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

Total G&A expenses for the first nine months of the year decreased by \$26,653, or 12%, from \$231,652 in 2001 to \$204,999 in 2002. The largest expense category, personnel costs, accounted for most of the reduction in total G&A expenses.

Personnel costs decreased \$35,690, from \$161,812 in 2001 to \$126,122 in 2002, or 22%. Specifically, consulting services declined by \$15,205, from \$59,101 in 2001 to \$43,896 in 2002. Charges for consulting services for the first nine months of 2001 included \$10,000 related to the former president of the Company, who was engaged on a part-time basis under a consulting agreement that provided for annual compensation of \$20,000. This arrangement was terminated by mutual agreement effective June 30, 2001, and in September 2001 this individual resigned as president but remains on the Board of Directors. An additional \$22,321 in 2001 represents amortization of deferred compensation of charges resulting from the grant of stock options in 1997 to the president by the Company's principal shareholder. Amortization of the related charges ended in December 2001. Total salaries and benefits increased \$1,836,or 2%, from \$80,390 in 2001 to \$82,226 in 2002,

Professional fees increased \$16,412, from \$17,579 in 2001 to \$33,991 in 2002, or 93%, primarily because during the second quarter of 2002 the Company engaged the services of an investor relations firm. Such charges totaled \$13,682 in 2002, including \$5,000 paid in the form of restricted stock, while there were no related charges in 2001. Other expenses in total decreased from \$52,261 in 2001 to \$44,886 in 2002, or \$7,375.

#### PART II - OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

- (a) Exhibits:
  - 4 Instruments defining the rights of security holders (contained in the Articles of Incorporation and By-laws, as amended, filed with the 1992 Annual Report on Form 10-KSB)
  - A Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- (b) Reports on Form 8-K:

On August 5, 2002, the Registrant filed a Current Report on Form 8-K to disclose that it had been awarded a \$200,000 contract for application of its heavy fuel engine technology.

On September 3, 2002, the Registrant filed a Current Report on Form 8-K containing a copy of the Letter to Shareholders that would appear in the Registrant's 2001 Annual Report to be included in proxy materials for the

2002 Annual Meeting of Shareholders scheduled for October 9, 2002.

#### SIGNATURES

In accordance with the requirements of the Exchange Act, the Registrant caused this report to be signed on its behalf by the undersigned, thereto duly authorized.

SONEX RESEARCH, INC. (Registrant)

/s/ George E. Ponticas

by:

George E. Ponticas Chief Financial Officer

November 18, 2002

#### EXHIBIT A

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

In connection with the Quarterly Report of Sonex Research, Inc. (the "Company") on Form 10- QSB for the quarter ending September 30, 2002, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned certify, pursuant to and for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

SONEX RESEARCH, INC.

/s/ Andrew A. Pouring

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

Andrew A. Pouring Chief Executive Officer November 18, 2002