ARRHYTHMIA RESEARCH TECHNOLOGY INC /DE/
Form 10KSB
April 01, 2005
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SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-KSB

[x] **Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For fiscal year ended December 31, 2004

[ ] **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

1-9731
(Commission file number)

ARRHYTHMIA RESEARCH TECHNOLOGY, INC.

(Name of small business issuer as specified in its charter)

Delaware	**72-0925679**
(State or other jurisdiction of incorporation of organiztion)	*(IRS Employer Identification Number)*
25 Sawyer Passway, Fitchburg, MA	**01420**
(Address of principal executive offices)	*(Zip Code)*

(978) 345-5000
(Issuer s telephone number, including area code)

Securities Registered Pursuant to Section 12 (b) of the Act:

Common Stock, $.01 par value	**American Stock Exchange**
(Title of Each Class)	*(Name of Each Exchange on Which Registered)*

Securities Registered Pursuant to Section 12 (g) of the Act:
None

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No ____

Check if disclosure of delinquent filers in response to Item 405 of Regulation S-B is not contained 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

State issuer's revenues for its most recent fiscal year ended December 31, 2004. $11,110,543

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the closing price of such stock as of February 17, 2005 was $32,439,580

On February 17, 2005 there were 2,635,898 shares of the issuer s common stock, par value $.01, outstanding, which is the only class of common or voting stock of the issuer.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2004. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-KSB.

Transitional Small Business Disclosure Format (Check one): Yes ____ No _X_

Arrhythmia Research Technology, Inc.
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PART I

Item 1. DESCRIPTION OF BUSINESS

OVERVIEW

Arrhythmia Research Technology, Inc. (ART) was incorporated under the laws of the State of Louisiana in 1981 and reincorporated under the laws of the State of Delaware in 1987. ART is engaged in the development and licensing of medical software, which acquires data and analyzes electrical impulses of the heart to detect and aid in the treatment of potentially lethal arrhythmias. ART s patented products consist of signal-averaging electrocardiographic (SAECG) software. In 2002, ART completed an update to a Windows based version of its proprietary Predictor® series. Rather than restore a direct sales force, the intent is to market ART s product through licensing with original equipment manufacturers. No significant sales of the software were recorded in 2003 or 2004. We continue to seek to establish contracts with original equipment manufacturers for this product.

Sudden cardiac death afflicts over 400,000 individuals in the United States each year. These occurrences are due to sustained ventricular tachycardia (abnormally rapid heartbeat) or ventricular fibrillation (very fast, completely irregular heartbeat), which severely affect the capability of the heart s pumping chambers or ventricles. The electric signals that emanate from the heart are used to detect the presence of late potentials, which indicate the risk of life-threatening ventricular arrhythmias. The SAECG processes enable Late Potentials to be amplified and enhanced, while eliminating undesired electrical noise in these tests.

ART s wholly owned subsidiary, Micron Products, Inc. (Micron), is a manufacturer and distributor of silver plated and non-silver plated conductive resin sensors (sensors) used in the manufacture of disposable integrated electrodes constituting a part of electrocardiographic diagnostic and monitoring instruments. Micron also acts as a distributor of metal snap fasteners (snaps), another component used in the manufacture of disposable electrodes. In 1997, Micron acquired the rights to an assembly machine, which it manufactures and sells or leases to its sensor and snap customers. Micron was incorporated in the State of Massachusetts in 1972, and is located in the same facility with ART in Fitchburg, Massachusetts. The sensors are a critical component of the signal pathway in many different types of disposable electrodes. For example, the disposable electrodes used to capture the electric impulses of the heart and enable the analysis of Late Potentials require sensors which provide for an accurate, low noise signal to be transmitted to the monitoring device.

Micron is the largest of a few companies providing silver / silver-chloride sensors to the medical device industry. Micron s customers manufacture monitoring and transmitting electrodes which are utilized in a variety of bio-feedback and bio-stimulation applications including, among many others, electrocardiograms (ECG s), electroencephalograms (EEG s), electro-muscular stimulation (EMS), and thermo-electrical neural stimulation (TENS). The Company believes that because of its history of producing high volume precision plastic products, Micron was able in 2004, to secure supply agreements to produce several other medical industry products. These high volume products provide diversification for Micron, and reduce its dependence on a single product line.

On May 7, 2004, Micron completed the purchase of substantially all of the operating assets of privately-held Shrewsbury Molders Inc. formerly known as New England Molders, Inc. (NEM) of Shrewsbury, Massachusetts. The Company completed the move of the division into its newly renovated molding facility located at the Company s Fitchburg complex in the fourth quarter of 2004. The relocation provides operational synergies and cost savings in manufacturing and administration. The NEM division is a custom molder that produces a wide variety of consumable medical products, medical device and equipment components, and other products for the consumer, electronic, and aerospace industries.

PRODUCTS

The following table sets forth for the periods specified, the revenue derived from the products of ART and its subsidiary Micron (collectively the Company):

	Year Ended December 31,			
	2004	%	2003	%
Sensors	$ 8,881,815	80	$ 7,227,647	94
Other Molded Products	1,841,671	17	--	--
Snaps & Snap Machines	387,057	3	449,555	6
SAECG products	--	--	165	--

	Year Ended December 31,			
Total	$ 11,110,543	100	$ 7,677,367	100

Sensors and Snaps

Silver Plated Sensors

Micron is a manufacturer and distributor of silver-plated and non-silver plated conductive resin sensors for use in the manufacture of disposable electrodes for ECG diagnostic, monitoring and related instrumentation. The disposable electrode has proven to be more reliable than the reusable electrodes available in the market. Additionally, disposable electrodes are easier and less expensive to use as compared to reusable electrodes, which require sterilization after each use. The type of sensor manufactured by Micron consists of a molded plastic substrate plated with a silver / silver chloride surface, which is a highly sensitive conductor of electrical signals. Silver / silver chloride-plated disposable electrodes are utilized in coronary care units and for other monitoring purposes. In addition to the traditional ECG tests, disposable electrodes incorporating Micron s sensor are used in connection with stress tests and Holter monitoring.

Micron also manufactures sensors and conductive plastic studs used in the manufacture of radiotranslucent electrodes. The radiotranslucent electrodes are virtually invisible to X-rays and are preferred in some applications such as nuclear medicine, cath labs, ICU/CCU and certain stress and Holter procedures. The radiotranslucent conductive plastic studs are manufactured with uniquely engineered resin to enable electrical conductivity between the sensor and the electrophysiological instrumentation without the use of a metal snap. Micron also manufactures the mating conductive resin snaps, which replace traditional metal snap fasteners, used in the radiotranslucent application.

Other custom designed sensors are manufactured for specific unique applications in the EEG, EMG or TENS markets. Recent growth in the volume of highly engineered EEG or electroencephalogram sensors reflects demand for noninvasive measuring of neurological impulses. Micron s strength in design and low cost manufacturing support enables our customers to grow into unique niche medical applications and electrophysiological monitoring with custom designed sensors.

Metal Snap Fasteners

Metal snap fasteners are used as an attachment and conductive connection between the disposable electrode and the lead wires of an ECG machine. Micron purchases the metal snap fasteners for resale from multiple suppliers and performs additional quality assurance tests, repackages and stocks product for its customers who may or may not purchase the snaps in addition to Micron s sensors.

Other Molded Components

In 2004, Micron began selling other precision custom molded high volume component parts. As a result of efforts to increase interest from industrial companies, in 2004 the Company added sales in these high volume molded products, which diversify our existing product lines while utilizing previously unused manufacturing capacity. The Company began shipping product and realizing sales of such high volume molded products in the fourth quarter of 2004. To defray the customer s upfront tooling costs and remain competitive with global competition, some high volume customers require the financing of a customer specific tool over several years. The cost of the tool is guaranteed by the customer and repaid over time as the molded product is shipped.

The incorporation of the NEM acquisition into the Micron molding facility increased production flexibility for both entities, and dramatically expanded the size and shape of products produced. From consumable medical products to medical equipment components, the new division will decrease the dependence on sensor production for manufacturing growth.

High Speed Electrode Assembly Machine

Manufacturers of disposable medical electrodes use the Company s attaching machines in the assembly of sensors and snaps into disposable electrodes. Manufacturing, leasing, selling, and providing replacement parts to medical sensor and snap application machines provide Micron with a complimentary product to sell to existing sensor and snap customers. As a value added service, a technician can be dispatched to troubleshoot and improve the performance of our customer s fully automated electrode assembly production lines.

Signal-Averaging Electrocardiographic (SAECG) Products

Predictor® 7

The Predictor® 7 software is a Windows® compatible version of Arrhythmia Research Technology s analytical program for the detection of Late Potentials. Predictor® 7 utilizes the unique, patented Bi-directional, Four-Pole Butterworth Filtering technique defined as the Standard by the joint AHA/ACC/ESC task force on Signal-Averaging Electrocardiography[1]. All clinically accepted measurement criteria are provided: total QRS duration, duration of the QRS under 40 µV, the RMS voltage of the last 40 msec of the QRS and the noise level. Graphical output of the analysis is presented both on screen and in hard copy. Predictor® 7 also incorporates additional signal processing capabilities for clinical research. The IntraSpect module permits detection of ventricular late potentials in patients with Bundle Branch Block. P-wave signal averaging helps predict patients at risk for atrial fibrillation and flutter. A Heart Rate Variability module can be incorporated on the Predictor platform.

GENERAL

Customers and Sales

Micron manufactures its sensors against purchase orders with electrode manufacturers. There are approximately 30 significant manufacturers of disposable snap type, radiotranslucent and pre-wired electrodes worldwide. Micron sells its sensors to most of these manufacturers. During the year ended December 31, 2004, each of three major customers accounted for over 10% of Micron s sales and a loss of this base would have a material adverse effect on results. These customers accounted for 31%, 14% and 12% of sales in 2004 as compared to 37%, 16% and 15% of sales for year ended December 31, 2003. The growth in new customers in addition to the acquisition of New England Molders decreased the concentration of total sales to these three customers by 16%.

Sales backlog is not material to Micron s business due to the method of ordering employed by its customer base in this competitive industry. Customers purchase on a single purchase order basis without long-term commitments.

The following table sets forth, for the periods indicated, the approximate consolidated revenues and percentages of revenues derived from the sales of the Company s products in its geographic markets:

	Revenues for the Years Ended December 31,			
	2004	%	2003	%
Canada	$ 3,813,151	34	$ 3,128,515	41
Europe	3,490,910	31	2,846,282	37
United States	3,326,697	30	1,149,181	15
Pacific Rim	273,105	3	471,261	6
Other	206,680	2	82,128	1
Total	$ 11,110,543	100	$ 7,677,367	100

While some risks exist in foreign markets, the vast majority of the Company s customers are based in stable markets. To reduce the risks associated with foreign shipment and currency exchange fluctuations, most of our products are the responsibility of our customers when shipped, and payment is required in US Dollars.

To counter the risk from fluctuations in the market price of silver, customers are subject to a silver surcharge or discount based on the market price of silver at the time of shipment. The Company is sensitive to the impact of recent increases in silver cost to our customers, and continues to explore options to help mitigate the resulting increases in surcharges.

Windows® is a registered trademark of Microsoft Corporation

[1] *AHA/ACC/ESC Policy Statement: Standards for the Analysis of Ventricular Late Potentials Using High Resolution or Signal-Averaged Electrocardiography: A Statement by a Task Force Committee of the European Society of Cardiology, the American Heart Association and the American College of Cardiology. JACC Vol. 17, No. 5, April 1991:999-1006*

Marketing and Competition

Management is actively pursuing licensing of the SAECG products to original equipment manufacturers for integration into existing cardio diagnostic equipment. The reemergence of research to support SAECG as a method to stratify risk for patients being considered for implantation of cardiac defibrillators is significant to the Company s marketing efforts. The Company will sponsor a satellite session on SAECG at a major scientific conference to be held in June 2005 in Gdansk, Poland.

Micron sells its sensors to manufacturers of disposable snap type and radiotranslucent ECG electrodes. The Company has one major domestic competitor and several minor competitors worldwide for sensors, and believes that its sales of sensors exceed those of its competition in aggregate. The competition in the sensor and snap market is extremely price sensitive. In an effort to ensure higher volume without a firm long term purchase order, some customers have entered into rebate programs with Micron. The rebates are typically paid to the customer after the end of the calendar year if certain volume thresholds are attained. These rebates are accrued and recorded with each sale as a reduction of gross sales. The rebates for the calendar year 2004 and 2003 were $122,034 and $69,513 respectively.

The Company markets Micron and its New England Molders division as a highly specialized custom injection molder to new and existing customers. The Company believe it competes effectively based on our expertise in low cost precision manufacturing of high volume close tolerance products. The complex medical products produced by the new division has expanded our existing customer base and extensively diversified the product mix. It is our intention to continue these efforts to market to the expanded customer base and further diversify our product offerings. Global competition creates a competitive environment. To meet this challenge, the new division focuses its product development efforts on complex products made to close tolerance not readily outsourced to offshore manufacturing.

Product Suppliers and Manufacturing

Micron manufactures its sensors at its Fitchburg, Massachusetts facility employing a proprietary non-patented multi-step process. All employees reaffirm confidentiality agreements annually to protect this proprietary process. The raw materials used by Micron are plastic resins used to mold the substrates and silver / silver chloride chemical solutions for plating the molded plastic substrates. Both the resins and the chemicals involved in the silver / silver chloride process are in adequate supply from multiple commodity sources. Fluctuations in the price of silver are contractually passed to customers in the form of a surcharge. To insulate from unanticipated price increases, some resins and chemicals used in the production of sensors are purchased in large quantity to lower or stabilize prices.

Resins used by the custom molding division are purchased for an individual customer order, with any increases in resin costs passed on to the customer as orders are acknowledged. Because the customer order determines the quantity of material required, customers may, and have, guaranteed the purchase of specific large quantities of product which allows the division to purchase large amounts of raw material at a more favorable cost thereby lowering the final cost to the customer.

Micron distributes medical grade nickel plated brass and stainless steel snap fasteners purchased from multiple domestic and international sources. Micron buys these snaps in bulk, performs additional quality assurance tests, and stocks inventory allowing for just in time shipments to its customers.

Inventory Requirements

Our larger customers benefit from our ability to produce and maintain an inventory of standard sensors and snaps. This inventory policy allows for predictable and planned production resulting in cost efficiencies that have been passed on to our customers. The rebate program discussed in the marketing section above ensures that volume based discounts to our customers are granted for targeted volume shipped.

Custom molded product is manufactured on an order by order basis. Finished goods inventory is product made in advance of an acknowledged sales order, part of an annual blanket order quantity, or for a specific safety stock requested by the customer.

Research and Development

ART s research and development efforts focus primarily on the conversion of DOS software packages in the SAECG product lines onto a Windows compatible platform. Our primary focus in 2004 was to verify the integrity of the analytical algorithms and prepare the software to facilitate integration with original equipment manufacturer s cardiac monitoring equipment. For the fiscal years ended December 31, 2004, and 2003, ART had research and development expenses of approximately $51,600 and $5,000, respectively, which consisted principally of payments to its programming consultants.

Micron s research and development expenses in 2004 were $32,000 which included unique process improvements to eliminate certain hazardous materials from our manufacturing processes. In 2003, research and development costs of $32,000 were expended on a new type of ECG sensor, production improvement processes, and a new type of EEG sensor for a specific customer.

Patents and Proprietary Technology

As part of the purchase of substantially all the assets of Corazonix Corporation in 1993, ART acquired three patents related to time and frequency domain analysis of electrocardiogram signals. The Corazonix technologies are utilized in the current version of Predictor® 7. ART acquired U.S. Patent No. 5,117,833 entitled *Bi-Spectral Filtering of Electrocardiogram Signals to Determine Selected QRS Potentials,* (the Bi-Spec Patent) which expires in 2009. ART also acquired three additional patents, which cover the spectral-temporal, mapping post-processing software packages sold by ART. In March 1997, the U.S. Patent Office granted United States Patent No. 5,609,158 entitled *Apparatus and Method for Predicting Cardiac Arrhythmia, by Detection of Micropotentials and Analysis of all ECG Segments and Intervals* which covers a frequency domain analysis technique for SAECG data.

The Company believes that ART s products do not and will not infringe on patents or violate proprietary rights of others. In the event that ART s products infringe patents or proprietary rights of others, ART may be required to modify the design of its products or obtain a license. There can be no assurance that ART will be able to do so in a timely manner upon acceptable terms and conditions. In addition, there can be no assurance that ART will have the financial or other resources necessary to enforce or defend a patent infringement or proprietary rights violation action. Moreover, if ART s products infringe patents or proprietary rights of others, ART could, under certain circumstances, become liable for damages, which could have a material adverse effect on earnings.

Micron employs a highly complex, proprietary non-patented multi-step manufacturing process for its silver/silver chloride-plated sensors. To maintain our trade secrets associated with the manufacture of disposable electrode sensors key employees are required to sign non-disclosure and/or non-competition agreements. Micron uses a patented material in the production of some sensors. Micron paid $4,970 in 2004 and $4,363 in 2003 in royalties associated with this patent.

Government Regulation

ART s software products are subject to, and ART believes currently comply with material clearance and distribution requirements from governmental regulatory authorities, principally the FDA and the European Union (EU). These agencies promulgate quality system requirements under which a medical device is to be developed, validated and manufactured. Continued development of the product line is managed in accordance with applicable regulatory requirements.

Micron s sensor elements are components used in medical devices designed and manufactured by original equipment manufacturers. As such, these elements are not required to be listed with regulatory agencies and do not require regulatory clearance for distribution. However, because Micron primarily distributes sensors to manufacturers for use in finished medical devices, Micron exercises as stringent controls over its manufacturing processes and finished products as would be required if the sensors were considered medical devices.

Micron s NEM Division manufactures parts for invasive medical devices, components for medical equipment, and patented disposable medical laboratory products. Our customers own the product designs and are, therefore, subject to FDA and EU regulations. While such products are a part of a medical device or other regulated equipment, our customers are the regulated entity for the clearance of those products. NEM exercises stringent controls over all its manufacturing operations and complies with any special controls required by its customers.

Environmental Regulation

Micron s operations involve use of hazardous and toxic materials and generate hazardous, toxic and other wastes. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of such materials and certain waste products. Although we believe that our safety procedures for using, handling, storing and disposing of such materials comply with these standards required by state and federal laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. A specific insurance policy has been purchased to mitigate this risk to the Company and the environment.

Since its inception, Micron has expended significant funds to train its personnel, install waste treatment and recovery equipment and to retain an independent environmental consulting firm to regularly review, monitor and upgrade its air and waste water treatment activities. Management continues to evaluate and test many possible technological advances that reduce or eliminate the need for and use of hazardous materials in our processes. The recent acquisition of proprietary equipment to eliminate a hazardous chemical from the process further

emphasizes the commitment to the reduction and elimination of certain hazardous processes. In 2004, the related expenditures for waste treatment were approximately $50,000 and $2,000 in depreciation of the treatment equipment. Operational costs are expected to be similar in 2005, and scheduled depreciation expense will be less than $1,000, as the equipment reaches its depreciable life. Micron believes that the operation of its manufacturing facility is in compliance with currently applicable safety, health and environmental laws and regulations.

Employees

As of December 31, 2004, the Company had 62 full-time and 1 part-time employee including 20 administrative, sales and supervisory personnel, 10 quality control personnel and 33 production personnel. The employees of the Company are not represented by a union and the Company believes our relations with our employees is satisfactory.

Medical Consultants

From time to time, the Company consults with medical advisors who report on advances in technology and on developments in their respective fields. During 2004 and 2003, the Company used consultants on a specific project basis. Amounts paid to medical consultants during 2004 and 2003 were $9,617 and $7,263, respectively.

Item 2. DESCRIPTION OF PROPERTY.

The manufacturing facility and offices of the Company are located in two buildings in an industrial area in Fitchburg, Massachusetts. The first building, which was purchased in April 1994, consists of a 22,000 square foot, six story building. The second building, which was purchased in September 1996, is a 94,000 square foot, two story building. Commencing in 2003, a 40,000 square foot portion of the second building underwent major renovations to preserve and create functional space from a previously unusable section of the facility. The renovations to the space where the new division is now located cost $929,345 to date of which $213,000 was related to equipment specific to the climate control and processing requirements of an injection molding facility. The new division only occupies a fraction of the renovated space, leaving more than half of the space available for future growth and expansion. Further renovations are expected in 2005, as the exterior improvements and office spaces are completed. We believe our current facilities are sufficient to meet our current and future production needs through fiscal year ending December 31, 2005 and beyond.

Item 3. LEGAL PROCEEDINGS.

The Company is from time to time subject to legal proceedings, threats of legal action and claims which arise in the ordinary course of our business. Management believes the resolution of these matters will not have a material adverse effect on our results of operations or financial condition.

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

The results of the Company s 2004 Annual Meeting of Shareholders were reported in the Company s Form 10-QSB for the quarter ending June 30, 2004.

PART II

Item 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

ART s Common Stock was listed on the American Stock Exchange on March 3, 1992 and trades under the ticker symbol HRT.

The following table sets forth, for the period indicated, the high and low sale prices per share for ART s Common Stock as quoted by the American Stock Exchange.

	High	Low
Year Ended December 31, 2004		
1st Quarter	$ 48.15	$ 16.68
2nd Quarter	23.75	9.35
3rd Quarter	34.10	7.50
4th Quarter	33.88	19.00
Year Ended December 31, 2003		
1st Quarter	$ 3.04	$ 2.55
2nd Quarter	4.90	2.75
3rd Quarter	6.80	4.03
4th Quarter	34.00	5.90

As of February 17, 2005 the number of record holders of ART s common stock was estimated to be 400.

Dividend Policy

The Company declared its first cash dividend in August of 2003, payable on September 1, 2003. The declared dividend of $.05 per share was paid using the cash reserves available. In February of 2004, the Company declared another dividend of $.05 per share payable on March 24, 2004 to holders of record on March 10, 2004 payable from the Company s cash reserves. In August of 2004, the Company declared a third dividend of $.06 per share payable on September 17, 2004 to holders of record on August 27, 2004 a 20% increase over previous dividends and also was paid from cash reserves. Future determination as to the payment of cash dividends, if any, will be at the discretion of the Board of Directors and will be dependent upon the Company s financial condition, results of operations, capital requirements, potential acquisitions, and other such factors as the Board of Directors may deem relevant, including any restrictions under any credit facilities in place now or in the future. The Company s demand line of credit agreement contains conditions including restrictions with regard to prior notification of the payment of dividends.

Recent Sales of Unregistered Securities

The Company, as previously reported, in connection with the acquisition of the operating assets of Shrewsbury Molders, Inc. issued on or about November 4, 2004, as partial consideration for the assets, an aggregate of 4,047 shares of its unregistered common stock, par value $0.01 per share, with a value of $ 100,000 from shares held in treasury. In connection with the issuance, the Company relied upon the exemption from registration pursuant to Regulation D promulgated under the Securities Act of 1933.

Item 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION.

The following discussions of the Company s results of operations and financial condition should be read in conjunction with the financial statements and notes pertaining to them that appear elsewhere in this Form 10-KSB.

Any forward looking statements made herein are based on current expectations of the Company that involves a number of risks and uncertainties and should not be considered as guarantees of future performance. These statements are made under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Forward looking statements may be identified by the use of words such as expect, anticipate, believe, intend, plans, predict, or will . The factors that could cause actual results to differ materially include: impact of com products and pricing, product demand and market acceptance risks, the presence of competitors with greater financial resources than the Company, product development and commercialization risks, changing economic conditions in developing countries, and an inability to arrange additional debt or equity financing.

Although the Company believes that our expectations are based on reasonable assumptions, we can give no assurance that our expectations will materialize. Many factors could cause actual results to differ materially from our forward looking statements. Several of these factors include, in addition to those contained in Factors that may affect future operating results, without limitation:

our ability to finance our business;
our ability to maintain our current pricing model and/or decrease our cost of sales;
a stable interest rate market and/or a stable currency rate environment in the world, and specifically the countries we are doing business in or plan to do business in;
continued availability of supplies or materials used in manufacturing at the current prices;

adverse regulatory developments in the United States or any other country we plan to do business in;
entrance of competitive products in our markets;
the ability of management to execute plans and motivate personnel in the execution of those plans;
no adverse publicity related to our products or the Company itself;
no adverse claims relating to our intellectual property;
the adoption of new, or changes in, accounting principles; legal proceedings;
our ability to maintain compliance with the American Stock Exchange requirements for continued listing of our common stock;
the costs inherent with complying with new statutes and regulations applicable to public reporting companies, such as the Sarbanes-Oxley Act of 2002;
our ability to efficiently integrate future acquisitions, if any;
and other new lines of business that the Company may enter in the future; and
other risks referenced from time to time elsewhere in this report and in our filings with the SEC.

The Company is under no obligation and does not intend to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events.

Results of Operations

The Company s products are primarily devices that aid in the detection and analysis of cardiac arrhythmias. The primary source of revenue relates to the production and sale of disposable electrode sensors used as a component part in the manufacture of integrated disposable electrophysiological sensors. These disposable medical devices are used world wide in the monitoring of electric signals in various medical applications. In an effort to leverage current skills, the Company has expanded into custom plastic injection molded products. Revenues in this sector include those from both high volume precision injection molding and that of an acquisition of a small privately held custom injection molding company. Management is attempting to further identify complementary and/or synergistic products, technologies and lines of business in an effort to broaden the Company s offerings.

The following table sets forth for the periods indicated, the percentages of the net sales represented by certain items reflected in the Company s statements of operations.

	Years ended December 31, 2004	2003
Net sales	100.0%	100.0%
Cost of sales	61.8	63.1
Gross profit	38.2	36.9
Selling and marketing	3.1	2.7
General and administrative	12.6	13.3
Research and development	0.8	0.5
Other (income), net	(0.3)	(0.7)
Income before income tax provision	22.0	21.1
Income tax provision	7.4	4.7
Net income	14.6%	16.4%

Revenue

Net Sales for 2004 were $11,110,543, an increase of $3,433,176, or 45%, when compared to the total net sales of $7,677,367 in 2003. The increase in net sales is a result of several factors. The operations of the NEM division acquired in May 2004 accounted for 46% of the increase in revenues. Secondly, an increase of 21% in sales volume in Micron s sensors resulted in an increase of 13.4% in sensor sales dollars. The volume increase came from several new types of sensors at various price points; therefore, the product mix sold is responsible for the difference in sales dollar increase and sales volume increase. The sensor sales increase included a substantial increase in silver surcharge collected. The price of silver has continued to rise, thereby increasing the amount of surcharge collected from our customers. The Company s ability to creatively assist with and respond to our customer s product development and design needs has contributed to the growth in overall sales dollars and unit volume in a competitive price sensitive market.

Cost of Sales

Cost of sales as a percent of revenues was 61.8% in 2004 compared to 63.1% in 2003. The reduction in cost of sales as a percentage of revenues in 2004 is primarily attributed to the process improvements and the increased unit volume that resulted in manufacturing efficiencies. By instituting these process improvements, management reduced material and manufacturing overhead costs directly associated with the cost of goods sold for sensors. The same focus on process improvement and cost reduction is beginning at the new division. The integration in the fourth quarter will improve collaboration of staff on cost reduction projects. The cost of sales as a percentage for the NEM division is 70% in 2004. This higher cost of sales percentage was due to the higher location costs, higher electric costs, and duplication of effort while at separate locations. The combination of the facilities is expected to improve margins in the custom injection molding business.

Selling and Marketing

Selling and marketing expenses increased from $208,585 (2.7% of net sales) to $349,586 (3.1% of net sales) an increase of $141,001, or 68% in 2004 as compared to 2003. The selling costs associated with the new division accounts for $120,955 of the increase. The remaining portion of the increase in expense includes the cost of a new sales person in the fourth quarter to focus on the selling of Micron s high volume precision injection molding skills. When comparing the cost as a percent of sales in 2003 and 2004 (2.7% to 3.1%), the increase is nominal.

At this time, no significant cost is associated with the effort to license the ART SAECG software products. The efforts to license this software are primarily those of executives and key managers, whose roles include responsibilities at Micron. The management intends to support presentations with respect to SAECG to be released at a conference in June 2005.

General and Administrative Expenses

General and administrative expenses were $1,399,302 (12.6% of net sales) in 2004 as compared to $1,020,869 (13.3% of net sales) in 2003, an increase of $378,433 or 37%. The general and administrative expenses relating to the new division was $146,635. The remaining increase was a combination of wage increases, compliance costs associated with the Sarbanes Oxley Act, and legal costs associated with registration of stock.

Research and Development

Research and development costs increased to $83,582 (0.8% of net sales) in 2004 from $37,285 (0.5% of net sales) in 2003, an increase of $46,297, or 124%. In 2004, $32,000 of the expenditure was related to Micron s development of a unique process to lower the consumption of hazardous materials. The remaining expense related to further development of the SAECG Software. In 2003, expenditures related to the development of specialty sensors of unique designs and dramatic process improvements to reduce the manufacturing cost of sensors.

Interest Expense

Interest expense was $198 in 2004 compared to $5,516 in 2003, a decrease of $5,318, or 96%. In 2003, the interest expense was a charge associated with the unutilized borrowing base of the revolving loan. This agreement was terminated in July 2003. The Company does not incur an unused borrowing base fee under our unsecured loan agreement.

Other Income (Expense)

Other income was $29,280 in 2004 compared to $61,027 in 2003, a decrease of $31,747, or 52%. The majority of other income was bank interest of $21,916 and $25,991 in 2004 and 2003, respectively. The remainder of 2004 other income was from the gain in the disposal of assets and other miscellaneous items, while the 2003 balance included the collection of a previously written off note related to a non-operating project for $29,995.

Income Taxes

The Company s effective income tax rate was 34% in 2004 compared to 22% in 2003. With the increase in income, the Company paid more state and federal taxes in 2004 as compared to 2003. The effective rates are lower than the statutory rates primarily due to the reductions in tax from one time credits and non-book tax expenses in 2004 and 2003. While the use of the net operating loss carry forwards will continue at the maximum allowed by Internal Revenue Code, the Company anticipates a greater percentage of income to be owed as taxes and thus a higher effective tax rate in the future.

Goodwill

As of December 31, 2004, the Company s goodwill of $1,434,000 is related to two reporting units, $1,244,000 associated with the acquisition of Micron Products, Inc. in 1992, and $190,000 associated with the acquisition of Shrewsbury Molders, Inc. in 2004. There was no impairment to the $1,244,000 balance of goodwill associated with the Micron Products acquisition based on the first quarter annual impairment test in 2004. The $190,000 of goodwill is subject to its first impairment test in the first quarter of 2005.

Earnings Per Share

The basic earnings per share was $0.61 in 2004 as compared to $0.48 in 2003 an increase of $0.13, or 27%. The increase in earnings reflects the combination increased volume which decreased per unit manufacturing cost, the acquisition of Shrewsbury Molders with a successful integration into the Fitchburg facility, and continued control over administrative expenses.

The Company has a stock repurchase program as described in the liquidity and capital resources discussion below which resulted in the repurchase of no shares in 2004 and 148,200 shares of the Company s common stock in the first quarter of 2003. The reduction in the number of outstanding shares increased the Company s earnings per share as reported in 2003 by $.02 per share.

Liquidity and Capital Resources

Working capital was $3,726,950 as of December 31, 2004 as compared to $4,122,793 as of December 31, 2003. The $395,843 decrease in working capital in 2004 was the direct result of the business combination activity and $1,396,933 investment in capital equipment. Operating results produced positive cash flows of $2,435,109 which was consumed by $1,146,355 in cash spent on the acquisition and the other capital investment. Cash and cash equivalents were $1,772,162 and $2,121,665 at December 31, 2004, and 2003, respectively. Substantially all of these funds are invested in fixed rate bank instruments that are highly liquid.

In addition, the announced repurchase program of the Company s common stock resulted in acquisition of no shares in 2004 and 148,200 shares for $438,640 in 2003. The Company reauthorized its most recent Stock Buy Back Program on June 26, 2003 authorizing an additional $650,000 worth of stock to be purchased from time to time as determined by management based upon market conditions.

Inventories increased by $78,991 at the end of 2004 compared to a decrease of $184,101 at the end of 2003. The increased use of capital to fund inventory at December 31, 2004 was the result of raw material requirements of the new precision molding work at Micron and the inventory of the new division.

The majority of capital equipment expenditures of $655,558 in 2004 and $736,685 in 2003 were related to the electrode sensor operation at Micron. In 2004, the capital expenditures included $121,000 from the 2003 process improvement project, $443,000 for other molding related upgrades and increased capacity, and $91,000 for technology enhancements and a new company truck. The disposal of the fully depreciated company truck resulted in a small gain from the sale. In 2003, $400,000 of the capital expenditures was spent on machinery and equipment in Micron s production facility. This included $85,000 paid for custom equipment for a process improvement project delivered in 2004. The tooling and equipment is expected to improve the production of sensor manufacturing by reducing in process waste.

Also in 2003 and 2004, approximately $1,000,000 was spent on property and building improvements. After $55,000 in 2003 for land improvements, the remaining $945,000 is associated with the renovation of the previously unused 40,000 square feet of space. The new division only occupies a fraction of the renovated space, leaving more than half of the space available for future growth and expansion. The ongoing cost of the space occupied by the NEM division is less than the rental cost of its previously occupied Shrewsbury location.

A new unsecured $1,000,000 renewable credit facility was negotiated and signed in December of 2003. The agreement provides for borrowings up to 80% of eligible accounts receivable plus 50% of raw material and finished goods inventories up to a $300,000 maximum. This facility has no borrowing base charge. There were no outstanding borrowings on our lines of credit as of December 31, 2004 and 2003, and no borrowings during 2004 and 2003. Interest expense includes an unutilized borrowing base charge of $0 and $5,500 in 2004 and 2003,

respectively.

The agreement contains covenants that apply upon drawing on the line. The covenants relate to various matters including notice prior to executing further borrowings and security interests, merger or consolidation, acquisitions, guarantees, sales of assets other than in the normal course of business, leasing, changes in ownership and payment of dividends.

Funding for future research and development is expected to come from cash provided by ongoing operations and at this time there are no plans for projects that would require outside funding.

During 2004, the Company filed a registration statement on Form S-3 with the Securities and Exchange Commission which was declared effective in September of 2004. The registration statement covers 500,000 shares of the Company s common stock. There are no immediate plans to offer and sell the registered shares. The Company believes that the shelf registration statement will provide greater flexibility in accessing capital markets when market conditions are conducive to an offering. Any proceeds from such a sale will be used for product development and general corporate purposes or to potentially pursue complementary new opportunities affording accretive earnings and increasing shareholder value.

On May 7, 2004, the Company reported on its Current Report on Form 8-K that it had announced that Micron consummated the purchase of substantially all of the operating assets of Shrewsbury Molders, Inc. formerly known as New England Molders, Inc. (NEMI) of Shrewsbury, Massachusetts. The purchase price included $1,146,355 from working capital and ART common stock with a market value of $400,000 of which $300,000 were issued by December 31, 2004. NEMI is a custom thermoplastic injection molding company specializing in the manufacture of intricately designed disposable products primarily for the medical and electronics industries.

Inflation

The Company does not believe that inflation in the United States or international markets in recent years has had a significant effect on its results of operations with one exception, the cost of silver. Silver pricing is passed onto our customers in the form of a surcharge, but this does not preclude the Company from being pressured as the price continues to climb. Silver surcharge collected from our customers is less than 9% of total sales.

Recent Accounting Pronouncements

In December 2004, the FASB revised SFAS No. 123, *Share Based Payment* , or SFAS No. 123R. SFAS No. 123R supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees* and amends Statement No. 95, *Statement of Cash Flows.* Under SFAS No. 123R, companies must calculate and record in the income statement the cost of equity instruments, such as stock options, awarded to employees for services received. The cost of the equity instruments is to be measured based on the fair value of the instruments on the date they are granted and is required to be recognized over the period during which the employees are required to provide services in exchange for the equity instruments. SFAS No. 123R is effective in the first interim or annual reporting period beginning after December 31, 2005.

The adoption of SFAS No. 123R is expected to have an impact on our consolidated financial statements. The impact of adopting SFAS No. 123R cannot be accurately estimated at this time, as it will depend on the market value and the amount of share-based awards granted in future periods.

Factors that may affect future operating results

In addition to the other information in this Form 10-KSB, the following factors should be considered in evaluating the Company and its business. The risks and uncertainties described below are not the only ones facing the Company. Additional risks and uncertainties that the Company does not presently know or currently deems immaterial may also impair the Company s business, results of operations and financial condition.

The Company s operating results may fluctuate significantly as a result of a variety of factors.

Our operating results may fluctuate significantly in the future as a result of a variety of factors, many of which are outside of our control. These factors include: the level of demand for the products that we may develop; our ability to attract and retain personnel with the necessary strategic, technical and creative skills required for effective operations; the amount and timing of expenditures by customers; the amount and timing of capital expenditures and other costs relating to the expansion of our operations; government regulation and general economic conditions. As a strategic response to changes in the competitive environment, we may from time to time make certain pricing, service,

technology or marketing decisions or business or technology acquisitions that could have a material adverse effect on our quarterly results. Due to all of these factors, our operating results may fall below the expectations of securities analysts, stockholders and investors in any future period.

If trade secrets are not kept confidential, the secrets may be used by others to compete against us.

Micron relies on unpatented trade secrets to protect its proprietary process. There are no assurances that others will not independently develop or acquire substantially equivalent technologies or otherwise gain access to our proprietary process. Ultimately the meaningful protection of such unpatented proprietary technology cannot be guaranteed. The Company relies on confidentiality agreements with its employees. Remedies for any breach by a party of these confidentiality agreements may not be adequate to prevent such actions. Failure to maintain trade secret protection, for any reason, could have a material adverse effect on us.

Dependence on a limited number of customers.

In the fiscal years 2004 and 2003, 57% and 68%, respectively of the Company s revenues were derived from three customers. The loss of any one or more of these customers would have an immediate significant adverse effect on our financial results. In an effort to maintain this customer base, more favorable terms than might otherwise be agreed to could be granted. Currently, the Company generally does not receive purchase volume commitments extending beyond several months. Large corporations can shift focus away from a need for our product with little or no warning.