

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 10-Q

Quarterly report under Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the quarterly period ended **March 31, 2010** or

Transition report under Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

**001-9731**

*(Commission file No.)*

**ARRHYTHMIA RESEARCH TECHNOLOGY, INC.**

*(Exact name of registrant as specified in its charter)*

**DELAWARE**

*(State or other jurisdiction of incorporation or organization)*

**72-0925679**

*(I.R.S. employer identification no.)*

**25 Sawyer Passway**

**Fitchburg, Massachusetts 01420**

*(Address of principal executive offices)*

**(978) 345-5000**

*(Issuer's telephone number, including area code)*

Check whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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  No .

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No .

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated filer  Accelerated filer  Non-Accelerated filer  Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of April 30, 2010 there were 2,675,481 shares of the Company's common stock outstanding.

**ARRHYTHMIA RESEARCH TECHNOLOGY, INC.**

**TABLE OF CONTENTS**

FORM 10-Q

March 31, 2010

PART I - FINANCIAL INFORMATION.....	1
Item 1. Consolidated Financial Statements .....	1
Consolidated Balance Sheets .....	1
Consolidated Statements of Income.....	2
Consolidated Statements of Cash Flows .....	3
Notes to the Consolidated Financial Statements .....	4
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations .....	6
Item 3. Quantitative and Qualitative Disclosure About Market Risks .....	10
Item 4. Controls and Procedures .....	10
PART II - OTHER INFORMATION .....	11
Item 6. Exhibits.....	11
SIGNATURES .....	11
Exhibit 31.1 Certification of Chief Executive Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002.....	X-1
Exhibit 31.2 Certification of Chief Financial Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002.....	X-2
Exhibit 32.1 Certification of Chief Executive Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002....	X-3
Exhibit 32.2 Certification of Chief Financial Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002....	X-4

**PART I - FINANCIAL INFORMATION**

**Item 1. Consolidated Financial Statements**

**ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY**

Consolidated Balance Sheets

<b>ASSETS</b>	<u>March 31, 2010</u> (Unaudited)	<u>December 31,</u> <u>2009</u> (Audited)
Current assets:		
Cash and cash equivalents .....	\$ 3,154,288	\$ 3,674,179
Trade and other accounts receivable, net of allowance for doubtful accounts of \$64,976 and \$49,976.....	4,222,544	3,818,538
Inventories, net .....	3,378,060	2,956,682
Deferred income taxes, net .....	66,000	22,500
Prepaid tax .....	49,289	123,789
Deposits, prepaid expenses and other current assets .....	238,485	147,243
Total current assets .....	<u>11,108,666</u>	<u>10,742,931</u>
Property and equipment, net of accumulated depreciation of \$10,683,341 and \$10,361,928 .....	6,462,346	6,343,575
Goodwill.....	1,564,966	1,564,966
Other intangible assets, net.....	88,400	95,887
Total assets .....	<u>\$ 19,224,378</u>	<u>\$ 18,747,349</u>
 <b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable .....	\$ 1,992,904	\$ 1,543,700
Accrued expenses .....	294,668	276,903
Total current liabilities .....	2,287,572	1,820,603
Long term liabilities:		
Long term deferred tax liability, net.....	383,000	350,000
Long term portion of deferred gain on lease .....	21,218	22,347
Total long term liabilities .....	369,218	372,347
Total liabilities .....	<u>2,691,790</u>	<u>2,192,950</u>
Shareholders' equity:		
Preferred stock, \$1 par value; 2,000,000 shares authorized, none issued.	-	-
Common stock, \$0.01 par value; 10,000,000 shares authorized, 3,926,491 shares issued, 2,675,481 outstanding.....	39,265	39,265
Additional paid-in-capital.....	10,354,299	10,317,403
Common stock held in treasury, 1,251,010 shares at cost.....	(3,413,742)	(3,413,742)
Retained earnings .....	9,552,766	9,611,483
Total shareholders' equity .....	<u>16,532,588</u>	<u>16,554,409</u>
Total liabilities and shareholders' equity.....	<u>\$ 19,224,378</u>	<u>\$ 18,747,359</u>

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

## ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY

Consolidated Statements of Income

(Unaudited)

	<b><u>Three months ended</u></b>	
	<b><u>March 31,</u></b>	
	<b><u>2010</u></b>	<b><u>2009</u></b>
Revenue .....	\$ 5,585,360	\$ 4,683,454
Cost of sales .....	<u>4,601,212</u>	<u>3,739,132</u>
Gross profit .....	984,148	944,322
Selling and marketing .....	157,989	150,449
General and administrative .....	603,997	575,505
Research and development .....	<u>55,673</u>	<u>68,758</u>
Total expense .....	817,659	794,712
Income from operations .....	166,489	149,610
Other income (expense), net .....	<u>122</u>	<u>(13,836)</u>
Income before income taxes .....	166,611	135,774
Income tax provision .....	<u>64,000</u>	<u>54,000</u>
Net income .....	<u>\$ 102,611</u>	<u>\$ 81,774</u>
Net income per share – basic .....	<u>\$ 0.04</u>	<u>\$ 0.03</u>
Net income per share – diluted .....	<u>\$ 0.04</u>	<u>\$ 0.03</u>
Weighted average common shares		
Outstanding – basic .....	2,675,481	2,688,291
Weighted average common shares		
Outstanding – diluted .....	2,707,864	2,688,291

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

## ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY

Consolidated Statements of Cash Flows

(Unaudited)

	<b><u>Three Months Ended</u></b>	
	<b><u>March 31,</u></b>	
	<b><u>2010</u></b>	<b><u>2009</u></b>
Cash flows from operating activities:		
Net income.....	\$ 102,611	\$ 81,774
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization.....	345,529	346,628
Share based compensation.....	36,896	32,270
Provision for doubtful accounts.....	15,000	6,000
Deferred tax assets.....	(10,500)	(15,500)
Changes in operating assets and liabilities:		
Trade and other accounts receivable.....	(419,006)	(515,967)
Inventories.....	(421,378)	(91,408)
Deposits, prepaid expenses and other assets.....	(21,036)	244,085
Accounts payable and accrued expenses.....	465,840	311,102
Net cash provided by operating activities.....	<u>93,956</u>	<u>398,984</u>
Cash flows from investing activities:		
Capital expenditures, net of disposals.....	<u>(452,519)</u>	<u>(193,932)</u>
Net cash used in investing activities.....	(452,519)	(193,932)
Cash flows from financing activities:		
Payments on acquisition note payable.....	-	(23,548)
Cash dividend paid.....	<u>(161,328)</u>	<u>-</u>
Net cash used in financing activities.....	<u>(161,328)</u>	<u>(23,548)</u>
Net increase (decrease) in cash and cash equivalents.....	(519,891)	181,504
Cash and cash equivalents at beginning of period.....	<u>3,674,179</u>	<u>2,320,467</u>
Cash and cash equivalents at end of period.....	<u>\$ 3,154,288</u>	<u>\$ 2,501,971</u>

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

## Notes to the Consolidated Financial Statements

### *1. Basis of Presentation:*

The unaudited interim consolidated financial statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, certain information and footnote disclosures normally included in complete financial statements prepared in accordance with generally accepted accounting principles have been omitted pursuant to such rules and regulations. The accompanying unaudited interim consolidated financial statements and related notes should be read in conjunction with the consolidated financial statements and notes thereto included in the Arrhythmia Research Technology, Inc. and subsidiary (the "Company") Annual Report on Form 10-K for the year ended December 31, 2009 filed March 10, 2010.

The information presented reflects, in the opinion of the management of the Company, all adjustments necessary for a fair presentation of the financial results for the interim period presented.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Operating results for interim periods are not necessarily indicative of results that may be expected for the entire fiscal year.

### *2. Inventories:*

	March 31, 2010	December 31, 2009
Inventories consist of the following as of:		
Raw materials.....	\$ 1,097,823	\$ 1,043,228
Work-in-process.....	375,046	243,360
Finished goods .....	1,905,191	1,679,094
Total .....	<u>\$ 3,378,060</u>	<u>\$ 2,956,682</u>

### *3. Share-Based Compensation:*

The Company accounts for non-cash share based compensation under ASC 718 "Stock Compensation", which establishes accounting for equity instruments exchanged for employee services. Under the provisions of ASC 718, share-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity grant).

The Company estimates the fair value of stock options using the Black-Scholes valuation model. Key input assumptions used to estimate the fair value of stock options include the exercise price of the award, the expected option term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the Company's expected annual dividend yield. The Company believes that the valuation technique and the approach utilized to develop the underlying assumptions are appropriate in calculating the fair values of the Company's stock options. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards.

The following assumptions were used to estimate the fair market value of options granted using the Black Scholes valuation method:

	Three Months Ended March 31, 2010
Dividend Yield	0%
Expected Volatility	31.18%
Risk Free Interest Rate	1.36%
Expected Option Terms (in years)	4.5

The Company recognized share-based compensation expense of \$36,896 and \$32,270 in general and administrative expense for the three months ended March 31, 2010 and 2009, respectively. A grant totaling 75,500 options to 16 persons, including directors and management, was made during the three months ended March 31, 2010. No grants were made in the first three months of 2009.

### Share-based Incentive Plan

At March 31, 2010, the Company has one stock option plan that includes both incentive stock options and non-statutory stock options to be granted to certain eligible employees, non-employee directors, or consultants of the Company. The maximum number of shares reserved for issuance is 400,000 shares. The options granted have six-year contractual terms and either vest immediately or vest annually over a five-year term.

At March 31, 2010, there were 92,500 shares available for future grants under the above stock option plan. The weighted average exercise price of options outstanding was \$7.55 at March 31, 2010.

The following table presents the average price and contractual life information about options outstanding and exercisable at March 31, 2010:

Exercise Price	Number of Outstanding Shares	Weighted Average Remaining Contractual Life (years)	Options Currently Exercisable	Average Fair Value at Grant Date
\$ 3.41	75,500	5.76	--	\$ 0.96
7.15	96,000	3.76	38,400	2.74
9.86	63,000	1.72	63,000	4.22
12.42	10,000	2.35	6,000	5.38
23.10	10,000	2.93	6,000	10.77

The aggregated intrinsic value of options outstanding and vested at March 31, 2010 was \$419,570 and \$30,720, respectively. The Company expects 110,397 of the 141,100 options to vest over their remaining life.

The following table summarizes the status of Company's non-vested options since December 31, 2009:

	Non-Vested Options	
	Number of Shares	Weighted Average Fair Value
Non-vested at December 31, 2009	86,800	\$ 3.42
Granted	75,500	0.96
Vested	(21,200)	3.50
Forfeited	-	-
Non-vested at March 31, 2010	141,100	\$ 2.09

At March 31, 2010, there was \$257,057 of total unrecognized cost related to non-vested share-based compensation arrangements granted under the Plan. This cost is expected to be recognized over a weighted average period of 4.09 years.

#### 4. Income Taxes:

The Company accounts for income taxes in accordance with ASC 740 "Income Taxes," which requires recognition of deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between the financial statement and tax bases of assets and liabilities using tax rates in effect for the year in which the differences are expected to reverse.

The Company files income tax returns in the U.S. Federal jurisdiction and various state jurisdictions. The periods from 2006 to 2009 remain open to examination by the IRS and state jurisdictions. The Company believes it is not subject to any significant tax risk. The Company does not have any accrued interest or penalties associated with any unrecognized tax benefits, nor were any interest expenses recognized during the three months ended March 31, 2010.

#### 5. Earnings per share:

In accordance with ASC 260, the basic earnings per share is computed by dividing net income available to common stockholders by the weighted average number of common shares outstanding. Diluted earnings per share is computed similar to basic earnings per share except that the denominator is increased to include the number of additional shares that would have been outstanding if the potential shares had been issued and if the additional shares were dilutive. At March 31, 2010, some of the stock options were anti-dilutive and excluded in the earnings per share computation.

## *6. Recent Accounting Pronouncements:*

In October 2009, the FASB issued Accounting Standards Update (“ASU”) No. 2009-13, “Multiple-Deliverable Revenue Arrangements” (“ASU 2009-13”). ASU 2009-13 establishes the accounting and reporting guidance for arrangements including multiple revenue-generating activities, and provides amendments to the criteria for separating deliverables, measuring and allocating arrangement consideration to one or more units of accounting. The amendments in ASU 2009-13 also establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor’s multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. The amendments also require providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. The amendments in ASU 2009-13 are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010. Early application is permitted. The Company is currently evaluating the potential impact, if any, the adoption of ASU 2009-13 will have on its financial position or results of operations.

## **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

### Forward-Looking Statements

Any forward looking statements made herein are based on current expectations of the Company that involve 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”. 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, without limitation: our ability to maintain our current pricing model and/or decrease our cost of sales; continued availability of supplies or materials used in manufacturing at competitive prices; volatility in commodity and energy prices and our ability to offset higher costs with price increases; adverse regulatory developments in the U.S. or any other country the Company plans to do business in; the costs inherent with complying with new statutes and regulations applicable to public reporting companies, such as the Sarbanes-Oxley Act of 2002; variability of customer delivery requirements; our ability to efficiently integrate future acquisitions and other new lines of business that the Company may enter in the future, if any; 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. More information about factors that potentially could affect the Company's financial results is included in the Company's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended December 31, 2009.

### Overview

Arrhythmia Research Technology, Inc. (“ART”) is engaged in the 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. Micron Products, Inc. (“Micron”), a wholly owned subsidiary, is the primary source of consolidated revenues. This primary source of revenue relates to the manufacturing of components, devices and equipment primarily for the medical and defense industries. The single largest product category of revenue relates to Micron’s production and sale of silver/silver chloride coated and conductive resin sensors used as component parts in the manufacture of integrated disposable electrophysiological sensors. These disposable medical devices are used worldwide in the monitoring of electrical signals in various medical applications. In an effort to leverage current skills, the Company has expanded into custom thermoplastic injection molded products and product life cycle management. This sector includes revenues from both high volume precision injection molding and custom injection molding. With the addition of a medical machining cell, the Company began production of patient specific metal medical devices. Management continues to identify complementary and/or synergistic products, technologies and lines of business in an effort to broaden the Company’s offerings.

## Results of Operations

**Revenue** for the three months ended March 31, 2010 was \$5,585,360 versus \$4,683,454 for the three months ended March 31, 2009, an increase of 19%. Revenues related to the license of the Company's SAECG product accounted for \$50,000 in the first three months of 2010. Micron's medical sensors and snaps with silver surcharge revenue increased by \$353,000 and high volume precision molded products and other miscellaneous sales increased by \$53,000. The change in revenues from sensors and snaps is due to increased volume in sensors. Revenue from the Micron Integrated Technology's (MIT) product life cycle management programs increased \$446,000 due to increased volume with our defense industry customers. The MIT division's revenue is derived from the custom molding, precision metal machining and mold making activities.

Revenue from domestic and foreign sales for the first three months is as follows:

	Three Months Ending March 31,			
	2010	%	2009	%
United States .....	\$ 3,108,220	55	\$ 2,615,989	56
Canada.....	1,340,010	24	946,678	20
Europe.....	489,162	9	801,546	17
Pacific Rim.....	391,296	7	151,430	3
Other .....	256,672	5	167,811	4
Total .....	\$ 5,585,360	100	\$ 4,683,454	100

The increase of sales in the United States and Canada is due to increasing volumes with existing customers. A European customer has begun to shift its manufacturing to the Pacific Rim.

**Cost of sales** was \$4,601,212 for the three months ended March 31, 2010 as compared to \$3,739,132 for the same period in 2009. The cost of sales was 82% of revenue for the three months ended March 31, 2010 as compared to 80% for the same period in 2009. The stabilization and reduction of costs remains a priority of management. The inability to increase our sensor prices in the competitive global marketplace hinders passing additional material and utility cost increases to our customers, excluding the escalating cost of silver. The increased cost of silver negatively affects margins as the higher cost equally increases the revenues and cost of sales. Management continues to investigate ways to improve the overall gross margin by elimination of low contribution products while increasing sales of higher margin product.

**Selling and marketing expense** was \$157,989 for the three months ended March 31, 2010 as compared to \$150,449 for the same period in 2009. The selling and marketing expense was 2.8% of sales in the three months ended March 31, 2010 and 3.2% for the same period in 2009. Selling expenses continue to be stable as a percentage of sales and is expected to remain stable in 2010.

**General and administrative expense** was \$603,997 for the three months ended March 31, 2010 as compared to \$575,505 for the same period in 2009. The general and administrative expense was 11% of sales in the three months ended March 31, 2010 and 12% for the same period in 2009. The expense is expected to be higher in 2010 as it will include auditor attestation costs related to Section 404 of the Sarbanes-Oxley Act of 2002 compliance.

**Research and development expense** was \$55,673 for the three months ended March 31, 2010 as compared to \$68,758 for the same period in 2009. The research and development expense was 1.0% of sales in the three months ended March 31, 2010 as compared to 1.5% in the same period in 2009. Approximately 50% of the expense was related to ART's SAECG software, Predictor™. Product testing and development costs continue in support of a National Institutes of Health research project utilizing ART's proprietary Signal Averaged ECG products. The remaining portion of the research and development expense is associated with continued work on process improvements to Micron sensor and snap product line. This work is expected to continue through the end of 2010.

**Other income (expense), net** was \$122 versus expense of (\$13,836) for the three months ended March 31, 2010 and 2009, respectively. Interest income in the period ended March 31, 2010 was offset by a loss on the disposal of assets of \$2,939 compared with a loss on disposal of assets of \$9,304 and interest expense of \$10,253 associated with an equipment note in the period ended March 31, 2009.

**Income taxes** as a percent of income before income taxes were 38% for the three months ended March 31, 2010 as compared to 40% for the same period in 2009. This difference was the result of tax credits earned or expected for the year ended December, 31 2010. Management will continue to seek to implement any tax planning opportunities that could effectively reduce the Company's income tax obligations in the future.

### Liquidity and Capital Resources

Working capital was \$8,821,094 at March 31, 2010 compared to \$8,922,328 at December 31, 2009, a decrease of \$101,234. During the quarter our capital investment and payment of a dividend exceeded our operating cash flow. Capital investment will decrease working capital with any significant investment resulting from future acquisition of assets or businesses, significant expansion of production capacity, a medical study, or further software development. Additionally, capital investment in manufacturing equipment is expected to reduce working capital over the near term.

Net capital expenditures were \$452,519 for the first three months of 2010 as compared to \$193,932 for the same period in 2009. The largest portion of the capital expenditures in the first three months of 2010 resulted from the routine replacement of production equipment and tooling on our sensor product line. Capital expenditures for the three months ended March 31, 2010 were made with cash on hand.

The Company has an unsecured \$2,000,000 credit line with a large multinational bank. The agreement provides for borrowings up to 80% of eligible accounts receivable plus 50% of raw material and finished goods inventories. This facility has no borrowing base charge. 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. No funds have been drawn down on the line as of March 31, 2010.

The Company expects to meet cash demands for its operations at current levels with current operating cash flows for the foreseeable future.

During the period ended March 31, 2010, the Board of Directors declared and paid a cash dividend of \$0.06 per share for a total of \$161,328.

In October 2008, the Company's Board of Directors authorized the repurchase in the open market from time to time of up to \$650,000 of the Company's outstanding stock. To date an aggregate of 36,199 shares were purchased under the program to date for an aggregate of \$87,163. No purchases were made in the first three months of 2010.

### Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with generally accepted accounting principles requires management to make judgments, assumptions and estimates that affect the amounts reported. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of the Company's financial statements and requires management to make difficult, subjective, and complex judgments that could have a material effect on the Company's financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) the Company is required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates the Company could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on the Company's financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. The Company bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable in the circumstances. These estimates may change as new events occur, as additional information is obtained and as the Company's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. These uncertainties are discussed in the section above entitled "Forward-looking Statements." Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that the Company's consolidated financial statements are fairly stated in accordance with generally accepted accounting principles, and present a meaningful presentation of the Company's financial condition and results of operations.

Management believes that the following are critical accounting policies:

*Revenue Recognition and Accounts Receivable*

The Company recognizes revenue upon product shipment, provided that there exists persuasive evidence of an arrangement, the fee is fixed or determinable, and collectability of the related receivable is reasonably assured.

The financing of customer purchased tooling utilizes the direct financing method of revenue recognition. This requires the gain or loss on the sale of the tooling to be recorded at the time the tool is put into service while the customer's stream of payments is reflected as a lease receivable.

Based on management's on-going analysis of accounts receivable balances, and after the initial recognition of the revenue, as to any event that adversely affects the ultimate ability to collect the related receivable, management will record an allowance for bad debts. Bad debts have not had a significant impact on the Company's financial position, results of operations and cash flows.

*Stock-Based Compensation*

The Company accounts for share based compensation under ASC 718, "Stock Compensation" ("ASC 718"). ASC 718 requires that companies recognize and measure compensation expense for all share-based payments at the grant date based on the fair market value of the award. This share-based compensation expense must be included in the Company's statement of operations over the requisite service period.

The Company uses the Black-Scholes option pricing model which requires extensive use of financial estimates and accounting judgment, including the expected volatility of the Company's common stock over the estimated term, and estimates on the expected time period that employees will retain their vested options prior to exercising them. The use of alternative assumptions could produce significantly different estimates of the fair value of the stock-based compensation and as a result, provide significantly different amounts recognized in the Company's statement of income.

*Inventory and Inventory Reserves*

The Company values its inventory at the lower of average cost or market. The Company reviews its inventory for quantities in excess of production requirements, obsolescence and for compliance with internal quality specifications. Any adjustments to inventory would be equal to the difference between the cost of inventory and the estimated net market value based upon assumptions about future demand, market conditions and expected cost to distribute those products to market.

The Company maintains some reserve for excess, slow moving, and obsolete inventory. A review of inventory on hand is made at least annually and some obsolete inventory is scrapped and/or recycled. The review is based on several factors including a current assessment of future product demand, historical experience, and product expiration.

*Deferred Tax Assets*

The Company assesses its deferred tax assets based upon a more likely than not to be realized criteria. The Company considers future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance. In accordance with ASC 740 we recognize the benefits of a tax position if that position is more likely than not to be sustained on audit, based on the technical merit of the position.

*Asset Impairment – Goodwill*

The Company reviews the valuation of goodwill and intangible assets to assess potential impairments. Management reassesses the useful lives of other intangible assets with identifiable useful lives in accordance with the guidelines set forth in ASC 350, "Intangible Assets". The value assigned to intangible assets is determined by a valuation based on estimates and judgment regarding expectations for the success and life cycle of products previously acquired or others likely to be acquired in the future. If the actual sale of product and market acceptance differs significantly from the estimates, management may be required to record an impairment charge to write down the asset to its realizable value. To test for impairment, a present value of an estimate of future cash flows related to goodwill or intangible assets with indefinite lives are calculated and compared to the value of the intangible asset during the first quarter annually. When impairment exists it could have a material adverse effect on the Company's business, financial condition and results of operations. After annual testing completed in the three months ended March 31, 2010, no impairment of goodwill was required.

#### *Asset Impairment – Long Lived Assets*

The Company assesses the impairment of long-lived assets and intangible assets with finite lives whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. When the Company's management determines that the carrying value of such assets may not be recoverable, management generally measures any impairment on a projected discounted cash flow method using a discount rate determined by management to be commensurate with the risk inherent in its current business model.

#### **Item 3. Quantitative and Qualitative Disclosure About Market Risks**

Not applicable.

#### **Item 4. Controls and Procedures**

##### *Evaluation of Disclosure Controls and Procedures*

As of the end of the period covered by this Quarterly Report, the Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer ("the Certifying Officers"), conducted evaluations of the Company's disclosure controls and procedures. As defined under Sections 13a – 15(e) and 15d – 15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the term "disclosure controls and procedures" means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures include without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including the Certifying Officers, to allow timely decisions regarding required disclosures. Based on this evaluation, the Certifying Officers have concluded that the Company's disclosure controls and procedures were effective to ensure that material information is recorded, processed, summarized and reported by management of the Company on a timely basis in order to comply with the Company's disclosure obligations under the Exchange Act and the rules and regulations promulgated thereunder.

##### *Changes in Internal Control over Financial Reporting*

Further, there were no changes in the Company's internal control over financial reporting during the Company's first fiscal quarter that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## PART II - OTHER INFORMATION

### Item 6. Exhibits

- (a) Exhibits
  - 3.0 Articles of Incorporation<sup>(a)</sup>
  - 3.1 Amended and Restated By-laws<sup>(b)</sup>
  - 10.43\* Employment agreement between James E. Rouse and the Company dated December 26<sup>th</sup>, 2006.<sup>(c)</sup>
  - 10.44\* Employment agreement between David A. Garrison and the Company dated January 1<sup>st</sup>, 2007.<sup>(d)</sup>
  - 31.1 Certification of the CEO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a) on page X-1.
  - 31.2 Certification of the CFO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a) on page X-2.
  - 32.1 Certification pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 on page X-3.
  - 32.2 Certification pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 on page X-4.

---

\* Indicates a management contract or compensatory plan required to be filed as an exhibit.

- (a) Incorporated by reference from the Company's Registration Statement on Form S-18 as filed with the Commission in April 1988, Registration Statement No. 33-20945-FW.
- (b) Incorporated by reference from the Company's Form 8-K as filed with the Commission May 8, 2009.
- (c) Incorporated by reference from the Company's Form 8-K as filed with the Commission on December 8, 2006.
- (d) Incorporated by reference from the Company's Form 10-KSB for period ended December 31, 2006 as filed with the Commission in March of 2007.

### SIGNATURES

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

ARRHYTHMIA RESEARCH TECHNOLOGY, INC.

May 4, 2010

By: /s/ James E. Rouse  
James E. Rouse  
President and Chief Executive Officer  
(Principal Executive Officer)

By: /s/ David A. Garrison  
David A. Garrison  
Executive Vice President and Chief Financial Officer  
(Principal Financial and Accounting Officer)

## Index to Exhibits

<u>Number</u>	<u>Exhibit</u>	<u>Page</u>
31.1	Certification of the CEO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-1
31.2	Certification of the CFO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-2
32.1	Certification pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-3
32.2	Certification pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-4

**CERTIFICATIONS**

I, James E. Rouse, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrhythmia Research Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the small business issuer as of, and for, the periods presented in this report;
4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the issuer's internal controls over financial reporting that occurred during the issuer's first fiscal quarter that has materially affected, or is reasonably likely to materially affect, the issuer's internal controls over financial reporting; and
5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

DATE: May 4, 2010

/s/ James E. Rouse  
James E. Rouse  
President & Chief Executive Officer

**CERTIFICATIONS**

I, David A. Garrison, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arrhythmia Research Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the issuer's internal controls over financial reporting that occurred during the issuer's first fiscal quarter that has materially affected, or is reasonably likely to materially affect, the issuer's internal controls over financial reporting; and
5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

DATE: May 4, 2010

/s/ David A. Garrison

David A. Garrison  
Executive Vice President and  
Chief Financial Officer

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

In connection with this Quarterly Report on Form 10-Q of Arrhythmia Research Technology, Inc. (the “Company”) for the quarter ended March 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned President and Chief Executive Officer certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

DATE: May 4, 2010

/s/ James E. Rouse

James E. Rouse  
President and  
Chief Executive Officer

*A signed original of this written statement required by Section 906 has been provided to Arrhythmia Research Technology, Inc. and will be retained by Arrhythmia Research Technology, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.*

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

In connection with this Quarterly Report on Form 10-Q of Arrhythmia Research Technology, Inc. (the “Company”) for the quarter ended March 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned President and Chief Executive Officer certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

DATE: May 4, 2010

/s/ David A. Garrison

David A. Garrison  
Executive Vice President and  
Chief Financial Officer

*A signed original of this written statement required by Section 906 has been provided to Arrhythmia Research Technology, Inc. and will be retained by Arrhythmia Research Technology, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.*