UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 10-QSB

[x] Quarterly report under Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended **March 31, 2005** or

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

1-9731
(*Commission file No.)*

ARRHYTHMIA RESEARCH TECHNOLOGY, INC.
(Exact name of small business issuer as specified in its charter)

DELAWARE	**72-0925679**
(State or other jurisdiction of incorporation or organization)	*(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 issuer (1) 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 _X_ No___.

As of April 15, 2005 there were 2,666,194 shares of the Company's common stock outstanding.

Transitional Small Business Disclosure Format Yes___No_X

ARRHYTHMIA RESEARCH TECHNOLOGY, INC.

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March 31, 2005

PART I - FINANCIAL INFORMATION

Item 1. Consolidated Financial Statements

ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY

Consolidated Balance Sheets

(Unaudited)

ASSETS	March 31, 2005	December 31, 2004
Current assets:		
Cash and cash equivalents	$ 1,484,580	$ 1,772,162
Trade and other accounts receivable, net of allowance for doubtful accounts of $18,594 and $20,724	2,226,039	1,918,207
Inventories, net	1,118,160	1,018,955
Deposits, prepaid expenses and other current assets	321,613	160,604
Total current assets	5,150,392	4,869,928
Property and equipment, net of accumulated depreciation of $5,542,140 and $5,370,142	4,735,602	4,693,500
Goodwill	1,479,727	1,433,641
Other intangible assets, net	257,724	307,538
Deferred income taxes, net	205,960	237,960
Other assets	151,938	126,759
Total assets	$ 11,981,343	$ 11,669,326
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 638,860	$ 358,491
Accrued expenses	287,431	684,487
Acquisition price payable	-	100,000
Total current liabilities	926,291	1,142,978
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	39,265	39,265
Additional paid-in-capital	9,598,397	9,515,717
Common stock held in treasury, 1,260,297 and 1,266,622 shares at cost	(3,451,120)	(3,468,440)
Retained earnings	4,868,510	4,439,806
Total shareholders' equity	11,055,052	10,526,348
Total liabilities and shareholders' equity	$ 11,981,343	$ 11,669,326

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

ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY

Consolidated Statements of Income

(Unaudited)

	Three Months Ended March 31, 2005	Three Months Ended March 31, 2004
Revenue	$ 3,107,699	$ 2,152,117
Cost of sales	1,942,918	1,337,985
Gross profit	1,164,781	814,132
Selling and marketing	160,858	41,942
General and administrative	331,755	274,803
Research and development	16,961	7,096
Income from operations	655,207	490,291
Other income, net	6,497	7,140
Income before income taxes	661,704	497,431
Income tax provision	233,000	179,000
Net income	$ 428,704	$ 318,431
Net income per share – basic	$ 0.16	$ 0.12
Net income per share – diluted	$ 0.16	$ 0.12
Cash dividends declared per share	$ 0.06	$ 0.05
Weighted average common shares outstanding – basic	2,663,945	2,632,441
Weighted average common shares outstanding – diluted	2,696,686	2,637,329

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

ARRHYTHMIA RESEARCH TECHNOLOGY, INC. AND SUBSIDIARY

Consolidated Statements of Cash Flows

(Unaudited)

	Three Months Ended March 31, 2005	Three Months Ended March 31, 2004
Cash flows from operating activities:		
Net income	$ 428,704	$ 318,431
Adjustments to reconcile net income to net cash provided by operating activities, net of effects of acquisition:		
Depreciation and amortization	168,280	124,965
Changes in operating assets and liabilities:		
Trade and other accounts receivable	(307,832)	(24,986)
Inventories	(99,205)	(30,721)
Deposits, prepaid expenses and other assets	(146,742)	35,319
Accounts payable and accrued expenses	(116,687)	260,440
Net cash (used for) provided by operating activities	(73,482)	683,448
Cash flows from investing activities:		
Capital expenditures, net of disposals	(214,100)	(366,878)
Net cash used in investing activities	(214,100)	(366,878)
Cash flows from financing activities:		
Cash dividend paid	-	(131,929)
Proceeds from the exercise of stock options	-	49,954
Net cash used in financing activities	-	(81,975)
Net increase (decrease) in cash and cash equivalents	(287,582)	234,595
Cash and cash equivalents at beginning of period	1,772,162	2,121,665
Cash and cash equivalents at end of period	$ 1,484,580	$ 2,356,260

Supplemental Information:

At March 31, 2005 the Company has $1,217 of dividends payable.

In 2005, $100,000 worth of treasury stock was issued in connection with the acquisition.

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. (the "Company") Annual Report on Form 10-KSB for the year ended December 31, 2004.

The information furnished 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.

Interim results are subject to year-end adjustments and audit of year-end results by our independent registered accounting firm.

2. Inventories:

Inventories consist of the following as of:	March 31, 2005	December 31, 2004
Raw materials	$ 359,803	$ 394,200
Work-in-process	268,335	273,253
Finished goods	490,022	351,502
Total	$ 1,118,160	$ 1,018,955

3. Stock-Based Compensation:

The Company accounts for stock options at intrinsic value in accordance with Accounting Principles Board Opinion No. 25, "*Accounting for Stock Issued to Employees*" ("APB 25"), and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123, "*Accounting for Stock-Based Compensation*" ("SFAS 123") and Statement of Financial Accounting Standards No. 148, "*Accounting for Stock-Based Compensation – Transition and Disclosure*." ("SFAS 148") Had compensation cost for the Company's stock options been determined based upon the fair value at the grant date for awards under the plans consistent with the methodology prescribed under SFAS 123, the Company's net income would have been adjusted to the pro forma amounts indicated below:

	Three months ended March 31, 2005	2004
Net income – as reported	$ 428,704	$ 318,431
Deduct: Total stock-based compensation expense determined under fair value based method	(7,876)	(7,876)
Net income – pro forma	$ 420,828	$ 310,555
Basic earnings per share:		
as reported	$ 0.16	$ 0.12
pro forma	$ 0.16	$ 0.12
Diluted earnings per share:		
as reported	$ 0.16	$ 0.12
pro forma	$ 0.16	$ 0.12

4. Acquisition:

On May 7, 2004, the Company's wholly-owned subsidiary, Micron Products, Inc., completed the purchase of substantially all of the operating assets of privately-held Shrewsbury Molders Inc. formerly known as New England Molders, Inc. ("NEMI") of Shrewsbury, Massachusetts. Micron paid NEMI a total purchase price of $1,546,000, including $1,146,000 in cash, $400,000 in ART common stock. The final payment of $100,000 in ART stock was made in February 2005. A final adjustment to the value of the intangible assets was made on March 31, 2005. The adjustment increased the goodwill and decreased the backlog, customer relationship, and non-compete intangible assets by $46,000. The adjustment resulted in a decrease of amortization expense of $13,500 in the period ending March 31, 2005.

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, involve a number of risks and uncertainties and should not be considered as guarantees of future performance. The factors that could cause actual results to differ materially include: interruptions or cancellation of existing contracts, inability to integrate acquisitions, impact of competitive 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. 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-KSB for the year ended December 31, 2004.

Results of Operations

Revenue for the three months ended March 31, 2005 was \$3,107,699 versus \$2,152,117 for the three months ended March 31, 2004, an increase of 44%. The New England Molders division contributed revenues of \$435,016 in the three month period ending March 31, 2005. The remaining increase in revenue of \$520,566 or 24% for the three months is due to continued growth in the Micron sensor product line and increases in sales to our growing high volume custom molding business. There were no sales of the Company's signal-averaging ECG products in 2005.

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

	Three Months Ending March 31,			
	2005	%	2004	%
Europe	$ 844,875	27	$ 922,926	42
Canada	1,198,134	39	875,780	41
United States	932,907	30	273,616	13
Pacific Rim	93,103	3	40,432	2
Other	38,680	1	39,363	2
Total	$ 3,107,699	100	$ 2,152,117	100

The shift in distribution of sales to the domestic market was not just a result of the new division's higher percentage of domestic sales, but also reflects the increase of Micron Products' new high volume precision custom molding business.

Cost of sales was 63% of revenue for the three months ended March 31, 2005 compared to 62% of revenue for the same period in 2004. The process improvements made during the past year continue to contribute to the stability of the cost to manufacture product. These programs instituted over the last 24 months continue to maintain margins, and improvements continue to offset increases in material costs. Management continues to investigate new methods to increase the overall gross margin without sacrificing product quality.

Selling and marketing expense was \$160,858 for the three months ended March 31, 2005 as compared to \$41,942 for the same period in 2004. The increased expense of \$118,916 is directly attributable to the sales staff in the new division. The selling and marketing expense was 5% of sales in the three months ended March 31, 2005 as compared to 2% of sales for the same period in 2004. With the progress in the integration of the new division, the consolidation of efforts in selling is expected to result in selling expenses decreasing as a percentage of sales as duplicate efforts are eliminated.

General and administrative expense was \$331,755 for the three months ended March 31, 2005 as compared to \$274,803 for the same period in 2004. The increase of \$56,952 in the three months ended March 31, 2005 includes the administrative cost of \$34,000 for the new division and an increase in other corporate expenses. Management expects a decrease in general and administrative expenses in future periods with the continued consolidation of office operations of the new division to the Fitchburg complex.

Research and development expense was $16,961 for the three months ended March 31, 2005 as compared to $7,096 for the same period in 2004. The increase was related to research expenditures for ART's product, Predictor® 7.

Other income, net was $6,497 and $7,140 of income for the three months ended March 31, 2005 and March 31, 2004, respectively. The other income is slightly lower due to the decrease in the cash balances in the first quarter of 2005.

Income taxes as a percent of income before income taxes were 35% and 36% for the three months ended March 31, 2005 and March 31, 2004, respectively. Management will continue to seek to maximize any tax planning opportunities that could effectively reduce the Company's income tax provision in the future.

Liquidity and Capital Resources

Working capital was $4,224,101 on March 31, 2005 compared to $3,726,950 at December 31, 2004, an increase of $497,151. The working capital increase was a result of the increase of sales contributing to higher accounts receivable and inventories as the business continues to expand. The reduction to cash resulted from tax payments related to the prior year as well as the first three months ending March 31, 2005. Capital investment could decrease working capital further with any significant investment resulting from another acquisition, significant expansion of production capacity, a medical study, or further software development.

Net capital expenditures were $214,100 for the first three months of 2005 as compared to $366,878 for the same period in 2004. Capital expenditures in the first three months of 2005 included $93,000 of ongoing renovations of 45,000 square feet of space occupied at the end of 2004 by the NEM Division. The remaining capital expenditures included $121,000 in additional machinery and equipment.

The Company's stock buyback program announced in June of 2003 has not resulted in any stock repurchases in the twelve months of 2004, or the first three months of 2005.

The Company negotiated the terms of a demand line of credit with a different bank than that of the same period in 2003. The new bank has agreed to an unsecured $1,000,000 credit line. No funds have been drawn down on the line as of March 31, 2005.

A cash dividend of $0.06 per share was announced in the first quarter of 2005, to be payable to shareholders of record on April 28, 2005 with payments commencing on May 5, 2005.

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

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 or 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 under 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

Revenues from the sale of products are recorded when the product is shipped, title and risk of loss have transferred to the purchaser, payment terms are fixed or determinable and payment 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, if an event occurs which adversely affects the ultimate collectibility of the related receivable, management will record an allowance for the bad debt. Bad debts have not had a significant impact on our financial condition, results of operations or cash flows.

Inventory and Inventory Reserves

The Company values its inventory at the lower of 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. If actual market conditions are less favorable than those projected by management, additional inventory reserves may be required.

The Company maintains a reserve for excess, slow moving, and obsolete inventory as well as inventory with a carrying value in excess of its net realizable value. A review of inventory on hand is made at least annually and a provision for excess, slow moving, and obsolete inventory is recorded. 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.

Asset Impairment – Goodwill

The Company reviews the valuation of goodwill and intangible assets to assess potential impairments on an annual basis. The management evaluates the carrying value of goodwill and other intangible assets in accordance with the guidelines set forth in SFAS 142. 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 acquired. To test for impairment, a present value of an estimate of future cash flows related to the intangible assets are calculated compared to the value of the intangible asset. Impairment may have a material adverse effect on the Company's financial condition or results of operations. There was no impairment at March 31, 2005.

Asset Impairment – Long Lived Assets

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

Item 3. 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, included 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.

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 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The Company, as previously reported, in connection with the acquisition of the operating assets of Shrewsbury Molders, Inc. issued on or about February 1, 2005, as partial consideration for the assets, an aggregate of 6,325 unregistered shares of its common stock, par value $0.01 per share, with a value of $100,000 from shares held in treasury. This was the final issuance of unregistered shares as required by the terms of the May 7, 2004 acquisition agreement.

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. Exhibits

Exhibit 31.1 - Certification of the CEO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a) on page X-1.

Exhibit 31.2 - Certification of the CFO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a) on page X-2.

Exhibit 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.

Exhibit 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.

SIGNATURES

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

ARRHYTHMIA RESEARCH TECHNOLOGY, INC.

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)

May 16, 2005

Exhibit 31.1

CERTIFICATIONS

I, James E. Rouse, certify that:

1. I have reviewed this Quarterly Report on Form 10-QSB 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 small business 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)) for the small business 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 small business 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. Evaluated the effectiveness of the small business 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
    c. Disclosed in this report any change in the small business issuer's internal control over financial reporting that occurred during the small business issuer's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and
5. The small business issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer's auditors and the audit committee of the small business 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 small business 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 small business issuer's internal control over financial reporting.

DATE: May 16, 2005

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

Exhibit 31.2

CERTIFICATIONS

I, David A. Garrison, certify that:

1. I have reviewed this Quarterly Report on Form 10-QSB 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 small business 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)) for the small business 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 small business 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. Evaluated the effectiveness of the small business 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
    c. Disclosed in this report any change in the small business issuer’s internal control over financial reporting that occurred during the small business issuer’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the small business issuer’s internal control over financial reporting; and
5. The small business issuer’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer’s auditors and the audit committee of the small business 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 small business 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 small business issuer’s internal control over financial reporting.

DATE: May 16, 2005

/s/ David A. Garrison
David A. Garrison
Executive Vice President and
Chief Financial Officer

Exhibit 32.1

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-QSB of Arrhythmia Research Technology, Inc. (the "Company") for the quarter ended March 31, 2005, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned President and Chief Executive Officer certify, 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 16, 2005

/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.

Exhibit 32.2

CERTIFICATION PURSUANT TO

18 U.S.C. §1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-QSB of Arrhythmia Research Technology, Inc. (the “Company”) for the quarter ended March 31, 2005, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned Chief Financial Officer certify, 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 16, 2005

/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.