AEROSONIC CORP /DE/ Form 11-K June 29, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS AND SIMILAR PLANS PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Fiscal Year Ended December 31, 2006

OR

Commission File Number 1-11750

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

AEROSONIC CORPORATION 401(k) PLAN

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Aerosonic Corporation 1212 North Hercules Avenue Clearwater, Florida 33765

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^{*} All other schedules required by Section 2520.103-10 of the United States Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable.

Signature 14

Exhibits

23 Consent of Tedder, James, Worden & Associates, P.A. 15

Report of Independent Registered Certified Public Accounting Firm

To the Administrator and Participants of the Aerosonic Corporation 401(k) Plan:

We have audited the accompanying statements of net assets available for benefits of the Aerosonic Corporation 401(k) Plan as of December 31, 2006 and 2005, and the related statement of changes in net assets available for benefits for the year ended December 31, 2006. These financial statements are the responsibility of the Plan s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Aerosonic Corporation 401(k) Plan as of December 31, 2006 and 2005, and the changes in net assets available for benefits for the year ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets held for investment purposes at end of year as of December 31, 2006 and the supplemental schedule of delinquent participant contributions for the year ended December 31, 2006 are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are supplementary information required by the United States Department of Labor s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan s management. The supplemental schedules have been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ TEDDER, JAMES, WORDEN & ASSOCIATES, P.A.

Orlando, Florida June 29, 2007

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AEROSONIC CORPORATION 401(k) PLAN

Statements of Net Assets Available for Benefits as of December 31, 2006 and 2005

	2006	2005
Investments, at fair value:		
Aerosonic Corporation common stock	\$ 173,861	\$ 197,775
Registered investment companies	5,475,056	5,148,113
Money market funds	814,451	604,639
Participant loans	120,709	164,590
Total investments	6,584,077	6,115,117
Net assets available for plan benefits	6,584,077	6,115,117

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

AEROSONIC CORPORATION 401(k) PLAN

Statement of Changes in Net Assets Available for Benefits For the Year Ended December 31, 2006

Additions to net assets attributed to:

Investment income:	
Interest and dividends	\$ 381,557
Net appreciation in fair value of investments	442,661
Total investment income	824,218
Contributions:	
Employers	236,931
Participants'	526,060
Total contributions	762,991
Total additions	1,587,209
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Deductions from net assets attributed to:	
Benefits paid to participants	(1,118,249)
Net increase	468,960
Not agests available for plan honofites	
Net assets available for plan benefits:	(115 117
Beginning of year	6,115,117
End of year	\$ 6,584,077

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

Aerosonic Corporation 401(k) Plan

Notes to Financial Statements December 31, 2006 and 2005

1. Plan Description

The following description of the Aerosonic Corporation 401(k) Plan (the **Plan**) provides only general information. Participants of the Plan should refer to the Plan document for a more complete description of the Plan.

General

The Plan is a defined contribution plan that covers the eligible employees of Aerosonic Corporation (the **Company**) by allowing them a system of savings and salary deferral and by providing discretionary employer profit sharing contributions.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (**ERISA**). The Plan was established on February 1, 1993, and has been amended from time to time thereafter.

Eligibility

Employees become eligible to participate in the Plan beginning on January 1, April 1, July 1, or October 1, immediately following completion of three months of service and attaining age 21.

Contributions

An eligible participant may voluntarily contribute, on a pre-tax basis, up to a maximum of 100% of his or her annual eligible compensation (up to the IRS maximum allowable amount) to the Plan. The maximum allowable pre-tax voluntary contribution, as determined under the Internal Revenue Code, was \$15,000 and \$14,000 for 2006 and 2005, respectively. A participant also may roll over to the Plan amounts from individual retirement accounts or distributions from other qualified defined benefit or defined contribution plans. The Company may also make contributions, in cash or Company common stock, to the Plan. The Company may make a matching contribution, as determined by the Board of Directors annually, of an amount equal to a percentage of a participant s contributions up to a maximum percentage of eligible compensation. For 2006 the Company contributed an amount equal to 100% of a participant s contributions up to 3% of eligible compensation. The total matching contribution made to the Plan amounted to approximately \$237,000 in cash for the year ended December 31, 2006. The Company may also make discretionary profit sharing contributions to the Plan, which are allocated to a participant s account based upon the participant s annual compensation. The Company did not make any discretionary profit sharing contributions to the Plan for 2006.

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1. Plan Description 6

Participant Accounts

Each participant s account is credited with the participant s contributions, his or her pro rata share of Company matching and additional discretionary contributions, and an allocation of Plan earnings or losses including market value adjustments on Plan investments. All contributions are held in trust and invested by the Plan s trustee in accordance with the options selected by the participants (i.e. all investments are participant-directed EXCEPT FOR Aerosonic Corporation common stock). Plan earnings (losses) are allocated to a participant s account based on the participant s account balance as a percent of total invested assets in each investment fund. The benefit to which a participant is entitled under the Plan is the benefit that can be provided from the participant s vested account.

Vesting

Participants are immediately vested in their contributions to the Plan plus actual earnings and losses thereon. Participants become vested in employer matching and additional discretionary contributions (and earnings or losses thereon) according to the following schedule:

	Vesting
Years of Service	<u>Percentage</u>
less than 2	0
2 but less than 3	33
3 but less than 4	67
4 or more	100

Participants become fully vested upon death, disability, attainment of normal retirement age, or upon termination of the Plan.

Distribution of Participant Accounts

Distributions of a participant s account are made upon retirement from the Company at age 65, in cases of financial hardship, termination from service with the Company, death, or disability. Participants still employed who have reached the age of 59½ and are 100% vested are eligible for one distribution per calendar year. Distributions are made in a single lump-sum payment, in whole shares of Company common stock, or in cash, or partially in Company common stock or partially in cash, as determined by the Plan Administrator and based upon the relative proportion in which the participant s account balance under the Plan consisted of Company common stock or investments.

The Plan allows participants that are less than age 70½ to defer benefit payments until they cease employment.

Forfeitures of Accounts

Forfeitures of a participant s non-vested balances are used to reduce employer contributions. During 2006 and 2005, forfeitures of \$11,666 and \$12,973, respectively, were used to reduce the employer s contributions. At December 31, 2006 and 2005, forfeited non-vested amounts, which remain as assets in the Plan, totaled \$10,127 and \$17,066, respectively.

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1. Plan Description 7

Participants Loans

Participants may borrow from their fund accounts a minimum of \$1,000 and up to a maximum of the lesser of \$50,000 or 50% of their vested account balance. A participant may not have more than one loan outstanding at any time. Loans, which are collateralized by the balance in the participant s account, bear interest at rates based upon the prime interest rate as published in *The Wall Street Journal* on the first business day of the month when the loan is drawn plus 1%, which ranged from 5.0% to 10.5% per annum at December 31, 2006. All loans are repaid through salary reductions within a period of five years, except loans to acquire the participant s principal residence, for which the term of the loan may be up to ten years. Each loan is documented in the form of a promissory note signed by the participant and collateralized by this pledge on the participant s account balance.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting, except for benefits paid, which are recorded when paid, in conformity with accounting principles generally accepted in the United States of America.

Use of Estimates

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, liabilities and changes therein and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

The Plan s investments are stated at fair value. The value of investments is determined using quoted market prices from national exchanges, which represent the net asset value of shares held by the Plan at year-end. Participant loans are valued at the amount of unpaid principal, which approximates fair value. The value of Aerosonic Corporation common stock is determined using the quoted market price from the American Stock Exchange at year-end. Interest income is recognized when earned. Dividend income is recorded on the ex-dividend date. Realized gains and losses on investments are recognized upon the sale of the related investments and unrealized appreciation or depreciation is recognized at period end when the carrying values of the related investments are adjusted to their estimated fair market value. Purchases and sales of investments are recorded on a trade date basis.

Earnings on investments, with the exception of participant loans, are allocated on a pro rata basis to individual participant accounts based on the type of investment and the ratio of each participant s individual account balance to the aggregate participant account balances. The portion of interest included in each loan payment made by a participant is recognized as interest income in the participant s individual account.

Net Appreciation (Depreciation) in Fair Value of Investments

The Plan presents in the statement of changes in net assets available for benefits the net appreciation (depreciation) in the fair value of investments, which consists of the realized gains or losses and the unrealized appreciation or depreciation on those investments.

Risks and Uncertainties

Investment securities are exposed to various risks, including those involving interest rates, the securities market, and credit conditions. Due to the level of risk associated with certain investment securities, changes in the values of such investment securities may involve declines in value in the near term and in the long term, and such declines could have a material adverse effect upon participants account balances, and the amounts reported in the statements of net assets available for benefits.

Payment of Benefits

The Plan records benefit payments to withdrawing participants when paid. Under the rules for preparation of the Form 5500, the Plan s Form 5500 will reflect an accrual for the amount to be paid to participants who withdrew from the Plan prior to year-end, and who had requested a distribution which was approved but not yet paid at period end, if any. There were no unpaid distributions at December 31, 2006 or 2005.

Administrative Expenses

The Plan provides that the Company may pay all or part of the administrative expenses of the Plan or administrative expenses can be charged against investment earnings before allocation to the participant accounts. All administrative expenses were paid by the Company for the benefit of the Plan and therefore are not reflected in the accompanying financial statements.

3. Investments

The following presents investments that represent 5% or more of the Plan s net assets as of December 31:

	<u>2006</u>	<u>2005</u>
Dreyfus Premier S&P Stars Fund	\$1,197,232	\$1,287,478
Putnam New Opportunities Fund	1,121,407	990,803
The George Putnam Fund of Boston	1,040,490	994,441
Putnam Global Equity Fund	888,772	666,003
Putnam Money Market Fund	814,451	604,639
Dreyfus Premier Intrinsic Value Fund	695,276	636,700
Putnam U.S. Government Income Trust	531,879	572,688
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3. Investments 9

The Plan s investments (including gains and losses on investments bought and sold, as well as those held during the year), increased in value by \$442,661 during the year ended December 31, 2006, as follows:

Registered investment companies	\$ 438,149
Aerosonic Corporation common stock	4,512
	\$ 442,661

4. Tax Status

The most recent favorable determination letter received by the Plan was dated August 1, 2002, which provides that the form of the Plan qualifies under the applicable provisions of the Internal Revenue Code for exemption from federal income taxes. The Plan was further amended and restated effective January 1, 2006 to incorporate changes required under final regulations issued under Sections 401(k) and 401(m) of the Internal Revenue Code, as well as other changes. The Company filed with the Internal Revenue Service an application for a favorable determination letter on the Plan on January 1, 2007. This application is still pending with the Internal Revenue Service, although the Company expects to receive a favorable determination letter on the Plan. Accordingly, no provision for income taxes has been included in the accompanying financial statements.

5. Plan Amendment and Termination

Although the Company has not expressed any intent to do so, the Company has the right, under the Plan, to amend any or all provisions of the Plan as well as discontinue contributions and terminate the Plan at any time, subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in their accounts. All such vested interests shall be non-forfeitable.

6. Concentrations of Credit Risk

Financial instruments which potentially subject the Plan to concentrations of credit risk consist of the Plan s investments. Management maintains the Plan s investments with what management believes to be high credit quality financial institutions and attempts to limit the amount of credit exposure to any particular investment.

7. Party-In-Interest

Section 3(14) of ERISA defines a party-in-interest to include, among others, fiduciaries or employees of the Plan, any person who provides services to the Plan, or an employer whose employees are covered by the Plan. Certain Plan investments are shares of registered investment companies managed by Putnam Fiduciary Trust Company. Putnam Fiduciary Trust Company is the trustee as defined by the Plan. Therefore, these transactions qualify as party-in-interest transactions. An employee of the Company serves as the plan administrator of the Plan. In addition, Plan investments include investments in the Company serves as the transactions also qualify as party-in-interest transactions.

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7. Party-In-Interest

8. Prohibited Transactions

During 2006, the Plan sponsor inadvertently failed to deposit approximately \$11,448 of participant deferrals within the required timeframe as stated by the United States Department of Labor (**DOL**). The DOL considers late deposits to be prohibited transactions. The Plan sponsor will file a Form 5330 and pay all applicable excise taxes. The excise tax payments will be made from the Plan sponsor s assets and not from assets of the Plan.

9. Subsequent Event

Effective January 1, 2007, the Plan changed its third party administrator from Mercer HR Services to Wachovia Retirement Services. The investment options available prior to January 1, 2007 were also replaced with the following investment options:

Wachovia Stable Value Fund	Growth Fund of America Inc.
Van Kampen US Mortgage Fund	RiverSource Mid Cap Value Fund
PIMCO Total Return Fund	Thornburg Core Growth Fund
Oakmark Equity & Income Fund	DWS Global Opportunities Fund
RiverSource Diversified Equity Income Fund	DWS Dreman Small Cap Value Fund
Enhanced Stock Market Fund	Alger SmallCap Growth Institutional Fund

In addition, participants may continue to choose investing in the Plan sponsor s common stock as an investment option.

Schedule I

AEROSONIC CORPORATION 401(k) PLAN

Schedule of Assets Held for Investment Purposes at End of Year as of December 31, 2006

EIN #74-1668471 Plan #002

(b) Identity of issue, borrower, lessor or similar	(c) Description of investment including maturity date, rate of interest, collateral, par	(d)	(e)
party	or maturity date	Cost	Current value
Dreyfus Corporation	Dreyfus Premier S&P Stars Fund	**	\$1,197,232
Putnam Investments	Putnam New Opportunities Fund	**	1,121,407
Putnam Investments	The George Putnam Fund of Boston	**	1,040,490
Putnam Investments	Putnam Global Equity Fund	**	888,772
Putnam Investments	Putnam Money Market Fund	**	814,451
Dreyfus Corporation	Dreyfus Premier Intrinsic Value Fund	**	695,276
Putnam Investments	Putnam U.S. Government Income Trust	**	531,879
Aerosonic Corporation Common Stock	Equity Securities of Aerosonic Corporation	\$347,961	173,861
Participant Loans	Various maturities ranging from February 2007 to		
	July 2015 (interest rates from 5.0% to 10.5%)	**	120,709
		\$347,961	\$6,584,077
	Identity of issue, borrower, lessor or similar party Dreyfus Corporation Putnam Investments Putnam Investments Putnam Investments Putnam Investments Dreyfus Corporation Putnam Investments Aerosonic Corporation Common Stock	Identity of issue, borrower, lessor or similar party Dreyfus Corporation Putnam Investments Putnam U.S. Government Income Trust Aerosonic Corporation Common Stock Participant Loans Various maturities ranging from February 2007 to	Identity of issue, borrower, lessor or similar party Dreyfus Corporation Dreyfus Premier S&P Stars Fund Putnam Investments Putnam U.S. Government Income Trust Aerosonic Corporation Common Stock Equity Securities of Aerosonic Corporation Participant Loans Various maturities ranging from February 2007 to July 2015 (interest rates from 5.0% to 10.5%) **

^{*} Party-in-interest

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Schedule II

AEROSONIC CORPORATION 401(k) PLAN

Schedule H, Part IV, Line 4(a) Schedule of Delinquent Participant Contributions EIN #74-1668471 Plan #002

Year Ended December 31, 2006

Participant Contributions	Total that Constitute Nonexempt		
Transferred Late to Plan	Prohibited Transactions		
\$11,448	\$11,448		

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^{**} Historical cost is not required as investments are participant-directed

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator of the Aerosonic Corporation 401(k) Plan has duly caused this annual report to be signed on its behalf by the undersigned thereunto duly authorized.

Aerosonic Corporation 401(k) Plan

By: /s/ Gary E. Colbert Executive Vice President and Chief Financial Officer, Secretary and Treasurer of Aerosonic Corporation and Agent for Service of Legal Process of the 401(k) Plan

June 29, 2007