Securities and Exchange Commission

Washington, D. C. 20549

FORM 11-K

Annual Report Pursuant to Section 15(d) of The Securities Exchange Act of 1934

For the Twelve Month Period Ended December 31, 2006

OR

Transition Report Pursuant to Section 15(d) of The Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number 0-20165

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

STERIS Corporation 401(k) Plan

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

STERIS Corporation 5960 Heisley Road Mentor, Ohio 44060

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AUDITED FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE

STERIS Corporation 401(k) Plan

December 31, 2006 and 2005 and the Year ended December 31, 2006 with Report of Independent Registered Public Accounting Firm

Audited Financial Statements and Supplemental Schedule

December 31, 2006 and 2005

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Exhibit:

Exhibit 23-Consent of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm

The Board of Directors STERIS Corporation Mentor, Ohio

We have audited the accompanying statements of net assets available for benefits of the STERIS 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 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. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and 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 Plan at December 31, 2006 and 2005, and the changes in its net assets available for benefits for the year ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2006, is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ ERNST & YOUNG LLP

Cleveland, Ohio June 26, 2007

Statements of Net Assets Available for Benefits

	December 31,	
	2006	2005
Assets:		
Investments, at fair value	\$ 263,073,570	\$ 237,165,718
Adjustment from fair value to contract value for interest in common/collective fixed income investment fund related to fully		
benefit responsive investment contracts	676,729	504,932
Net assets available for benefits	\$ 263,750,299	\$ 237,670,650

See accompanying notes to the audited financial statements.

Statement of Changes in Net Assets Available for Benefits

Year ended December 31, 2006

Additions:	
Net realized and unrealized appreciation in the value of investments	\$ 22,508,707
Interest and dividend income	2,472,594
Loan interest income	360,345
Contributions:	
Participant	15,425,739
Employer	5,223,630
Rollovers	1,838,883
Total contributions	22,488,252
Total additions	47,829,898
Deductions:	
Benefits paid directly to participants	21,611,910
Administrative expenses	138,339
Total deductions	21,750,249
Net increase	26,079,649
Net assets available for benefits:	
Beginning of year	237,670,650
End of year	\$ 263,750,299

See accompanying notes to the audited financial statements.

Notes to Audited Financial Statements

December 31, 2006 and 2005

1. Description of Plan

The following brief description of the STERIS Corporation 401(k) Plan (the Plan) provides only general information. Participants should refer to the Plan document for complete information regarding the Plan's provisions.

General

The Plan is a defined contribution plan administered by STERIS Corporation (the Company, STERIS, or Plan Administrator). Generally, all domestic employees of STERIS and certain subsidiaries and certain employees performing services outside the United States who have attained the age of 18 are eligible to participate in the Plan on the first day of the month following the month that they began employment with the Company. Effective October 20, 2006, the Plan was amended to provide coverage under the Plan to employees of any domestic subsidiary that has adopted the Plan. Effective December 7, 2006, the Plan was amended to provide the same eligibility requirements for part-time employees as for full time employees and for deferrals to begin with the first practicable payment of compensation. The assets of the Plan are maintained and the transactions therein are executed by Delaware Charter Guarantee & Trust Company d/b/a/ Principal Trust CompanySM, a member company of The Principal Financial Group[®] (the Trustee), who also serves as the Plan record-keeper. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Contributions

All contributions made by a participant are "before-tax" deferred compensation contributions. Participants may also contribute amounts representing distributions from other qualified defined contribution plans. The Plan allows participants to contribute between zero and 20 percent of their compensation received during a calendar year. Participants age 50 and older may also make additional catch up contributions. The Plan allows participants to modify deferral percentages at any time. Effective November 1, 2005, the Plan was amended to allow for automatic enrollment with a 3% contribution of an eligible participant's compensation unless the participant has affirmatively elected a contribution level or not to contribute to the Plan. The Company will invest 100% of the contributions to the Plan in the default investment option (Dodge & Cox Balanced Fund) on behalf of the participant until an affirmative election is received from the participant.

Notes to Audited Financial Statements (continued)

1. Description of Plan (continued)

The Company may make matching discretionary contributions to a participant's account. Employer contributions are allocated to each participant's account in accordance with the investment election choices made by the participant. For the year ended December 31, 2006, the Company made 25 percent matching cash contributions on the first 6 percent of compensation that an employee of Erie UAW Local 832 and Erie IAM Local 1968, hired on or before December 4, 1998 made to the Plan. The Company made a 50 percent matching contribution in cash on the first 6 percent of compensation made to the Plan for all other participants. The Company discretionary matching contribution is made each pay period upon approval by the Company's Board of Directors, which is granted on an annual basis.

Vesting

All participants are immediately vested in their contributions plus actual earnings thereon and Company matching contributions plus actual earnings thereon.

Participant Accounts

A separate account is maintained for each participant in the Plan, reflecting contributions, investments, realized and unrealized investment gains and losses, loans, withdrawals, transfers, and investment fees. The net value of each participant account is established at the close of each business day through the valuation of each fund's assets at market value.

Participants may elect to invest contributions, including the Company contributions, in any combination of the investment funds offered by the Plan, including STERIS Corporation common stock, in 1% increments.

Participants can generally change their investment elections at any time. A participant may elect to have a portion or all of the balance of prior contributions (in increments of 1%) transferred from any fund in which it is invested to any other fund, subject to any transfer restrictions that the fund may impose.

Notes to Audited Financial Statements (continued)

1. Description of Plan (continued)

Plan Withdrawals and Distributions

On termination of service, upon death, disability or retirement, participants may receive a lump sum amount equal to the vested value of their account balance. Employed participants who are age 59-1/2 or older or who have a specific financial hardship may withdraw a portion of their vested account balance.

Participants Loans

Participants currently employed may borrow from their fund accounts a minimum of \$500 up to a maximum equal to the lesser of \$50,000 or 50 percent of their vested account balance. Loan terms generally range from 1-5 years and are secured by the balance in the participant's account. Loan terms for loans used for the purchase of a participant's primary residence can be longer than five years. The loans bear interest at a rate established by the Trustee. Principal and interest is paid through payroll deductions. Participants may have only one loan outstanding at any time and participants may take only one loan in a twelve-month period.

Plan Termination

Although it has not expressed any intent to do so, the Company, by action of its Board of Directors and without approval of its shareholders, has the right under the Plan to amend, suspend, or terminate the Plan in its entirety subject to the provisions of ERISA. In the event of Plan termination, participants will remain 100 percent vested in their accounts.

Plan Expenses

Costs incident to the purchase and sale of securities, such as brokerage commissions and stock transfer taxes, are paid by the respective funds. All other administrative expenses incurred in the administration of the Plan are charged against the respective funds, unless the employer elects to pay such amounts. The Company has elected to pay audit and consulting fees only.

Notes to Audited Financial Statements (continued)

2. Summary of Accounting Policies

Basis of Accounting

The financial statements have been prepared on the accrual basis of accounting.

Investment Valuation and Income Recognition

The Plan's investments in common shares are stated at fair value which equals the quoted market price on the last business day of the plan year. The fair value of the participation units held by the Plan in the mutual funds is based on quoted redemption values on the last business day of the plan year. The participation units held by the Plan in the common/collective fixed income investment funds are valued at contract value (see Note 5). The pooled separate accounts are valued at the redemption value of units held by the Plan at year end. The participant loans are valued at their outstanding balances, which approximate fair value. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

New Accounting Pronouncement

In December 2005, the Financial Accounting Standards Board (FASB) issued FASB Staff Position AAG INV-1 and SOP 94-4-1, *Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans* (the FSP). The FSP defines the circumstances in which an investment contract is considered fully benefit responsive and provides certain reporting and disclosure requirements for fully benefit responsive investment contracts in defined contribution, health and welfare and pension plans. The financial statement presentation and disclosure provisions of the FSP are effective for financial statements issued for annual periods ending after December 15, 2006, and are required to be applied retroactively to all prior periods presented for comparative purposes. The Plan has adopted the provisions of the FSP at December 31, 2006.

Notes to Audited Financial Statements (continued)

2. Summary of Accounting Policies (continued)

As required by the FSP, investments in the accompanying Statements of Net Assets Available for Benefits include fully benefit responsive investment contracts recognized at fair value. AICPA Statement of Position 94-4-1, *Reporting of Investment Contracts Held by Health and Welfare Benefit Plans and Defined Contribution Pension Plans*, as amended, requires fully benefit responsive investment contracts to be reported at fair value in the Plan's Statement of Net Assets Available for Benefits with a corresponding adjustment to reflect these investments at contract value. The requirements of the FSP have been applied retroactively to the Statement of Net Assets Available for Benefits as of December 31, 2005 presented for comparative purposes. Adoption of the FSP had no effect on the Statement of Changes in Net Assets Available for Benefits for any period presented.

3. Transactions with Parties-in-Interest

Party-in-interest transactions include the investment in the funds of the Trustee and the payment of administrative expenses.

The Plan did not purchase any common shares of the Company and sold common shares of the Company for \$4,065,116 during the year ended December 31, 2006.

4. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service dated July 10, 2002, stating that the plan is qualified under Section 401(a) of the Internal Revenue Code (the Code). Therefore, the related trust is exempt from taxation. Subsequent to this determination by the Internal Revenue Service, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan Administrator has indicated that it will take the necessary steps to maintain the Plan's qualified status.

5. Investment Contracts

The Plan invests in a common/collective fixed income investment fund, the KeyBank EB Managed Guaranteed Investment Contract Fund (the "Fund"), which holds fully benefit responsive investment contracts. As a result of implementation of the FSP (see Note 2), the Plan reflected the Fund at fair value and recognized an adjustment from fair value to contract value for the fully benefit responsive investment contract of \$676,729 and \$504,932 as of December 31, 2006 and 2005, respectively, in the accompanying Statements of Net Assets Available for Benefits. The fair value of the Fund as of December 31, 2006 and 2005 was \$32,467,384 and \$31,442,798, respectively.

Notes to Audited Financial Statements (continued)

6. Investments

During 2006, the Plan's investments (including investments purchased, sold, as well as held during the year) appreciated in value as follows:

	Year Ended cember 31, 2006
Net realized and unrealized appreciation in the value of investments:	
STERIS Corporation Common Stock Fund	\$ 237,894
Mutual funds	12,399,301
Common/Collective fixed income investment fund	1,343,779
Pooled separate accounts	8,527,733
Net realized and unrealized appreciation in the value of investments	\$ 22,508,707

Investments that represent 5% or more of the fair value of the Plan's net assets available for benefits are as follows:

	Decen	December 31,	
	2006	2005	
Dodge & Cox Balanced Fund	\$ 62,521,657	\$ 55,984,122	
Principal Large Cap. Stock Index Separate Account	48,084,455	42,347,385	
KeyBank EB Managed Guaranteed Investment Contract Fund	32,467,384	31,442,798	
STERIS Corporation Common Stock Fund	24,781,375	29,391,919	
Neuberger Berman Genesis Asset Fund	17,114,986	22,098,553	
American Funds Europacific Growth R4 Fund	14,851,158	NA	
Pimco Total Return Admin. Fund	NA	13,396,859	

NA-Investment did not represent more than 5% of the fair value of the Plan's net assets available for benefits.

7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statement of Net Assets Available for Benefits.

Notes to Audited Financial Statements (continued)

8. Differences Between Financial Statements and Form 5500

The accompanying financial statements present fully benefit responsive contracts at contract value. The Form 5500 requires fully benefit responsive contracts to be reported at fair value. Therefore, the adjustment from fair value to contract value for fully benefit responsive investment contracts represents a reconciling item.

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	December 31, 2006
Net assets available for benefits per the financial statements	\$263,750,299
Adjustment from fair value to contract value for interest in common/collective fixed income investment fund related to fully	
benefit responsive investment contracts	(676,729)
Net assets available for benefits per Form 5500	\$263,073,570

The following is a reconciliation of the net increase in assets available for benefits per the financial statements to net income per the Form 5500:

	December 31, 2006
Net increase in net assets available for benefits per the financial statements	\$26,079,649
Net increase in the adjustment from fair value to contract value for interest in common/collective fixed income investment fund	
related to fully benefit responsive investment contracts	(676,729)
Net income per Form 5500	\$25,402,920

9. Subsequent Events

Effective May 1, 2007, the Plan was amended to change the Plan to a stock bonus plan and the portion of the Plan invested in STERIS stock to an Employee Stock Ownership Plan, and to provide for a cash payment option with respect to dividends paid on the STERIS stock.

EIN: 34-1482024 Plan Number: 001

Schedule H, Line 4i—Schedule of Assets (Held at End of Year)

December 31, 2006

Mutual Funds:Pacific Investment Management Co.Pimco Total Return Admin. Fund12,903Dodge and Cox FundsDodge & Cox Balanced Fund62,521Victory FundsVictory Diversified Stock A Fund10,384Fidelity InvestmentsFidelity Advisor Mid Cap T Fund12,140Neuberger Berman Management, Inc.Neuberger Berman Genesis Asset Fund17,114	Description of Investment Including Maturity Date, Rate of Interest Par, or Maturity Value Current Value	Identity of Issue, Borrower, Lessor, or Similar Party
Mutual Funds: Pacific Investment Management Co. Pimco Total Return Admin. Fund 12,903 Dodge and Cox Funds Dodge & Cox Balanced Fund 62,521 Victory Funds Victory Diversified Stock A Fund 10,384 Fidelity Investments Fidelity Advisor Mid Cap T Fund 12,140 Neuberger Berman Management, Inc. Neuberger Berman Genesis Asset Fund 17,114		Common Stock:
Pacific Investment Management Co.Pimco Total Return Admin. Fund12,903Dodge and Cox FundsDodge & Cox Balanced Fund62,521Victory FundsVictory Diversified Stock A Fund10,384Fidelity InvestmentsFidelity Advisor Mid Cap T Fund12,140Neuberger Berman Management, Inc.Neuberger Berman Genesis Asset Fund17,114	RIS Corporation Common Stock Fund\$ 24,781,375	* STERIS Corporation
Dodge and Cox FundsDodge & Cox Balanced Fund62,521Victory FundsVictory Diversified Stock A Fund10,384Fidelity InvestmentsFidelity Advisor Mid Cap T Fund12,140Neuberger Berman Management, Inc.Neuberger Berman Genesis Asset Fund17,114		Mutual Funds:
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		American Funds Service Company
American Funds Service CompanyAmerican Funds Growth Fund of America R4 Fund4,652	rican Funds Growth Fund of America R4 Fund 4,652,174	American Funds Service Company
* Principal Life Insurance Company Vanguard Explorer Portfolio 2,659	uard Explorer Portfolio 2,659,890	* Principal Life Insurance Company
* Principal Life Insurance Company Vanguard U.S. Value Portfolio 3,282	uard U.S. Value Portfolio 3,282,652	* Principal Life Insurance Company
140,511	140,511,354	
Common/Collective Fixed Income Investment Funds:		Common/Collective Fixed Income Investment Funds:
Victory FundsKeyBank EB Managed Guaranteed Investment Contract Fund32,467	Bank EB Managed Guaranteed Investment Contract Fund32,467,384	Victory Funds
Pooled Separate Accounts		Pooled Separate Accounts
* Principal Life Insurance Company Principal Large Cap. Stock Index Separate Account 48,084	cipal Large Cap. Stock Index Separate Account 48,084,455	* Principal Life Insurance Company
	59,967,919	
Other		Other
* Participant Loans Bearing interest between 5.00% and 10.50% and maturing through	ing interest between 5.00% and 10.50% and maturing through	* Participant Loans
	035 5,345,538	
\$ 263,073	\$ 263,073,570	

* Indicates party-in-interest to the Plan.

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Administrator of the Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

STERIS Corporation 401 (k) Plan By: STERIS Corporation, Plan Administrator

Dated: June 29, 2007

By: /s/ MICHAEL J. TOKICH

Michael J. Tokich Vice President and Corporate Controller, STERIS Corporation

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference of our report dated June 26, 2007, with respect to the financial statements and schedule of the STERIS Corporation 401(k) Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2006 in the following Registration Statements:

Registration Number	Description
33-55976	Form S-8 Registration Statement – STERIS Corporation 401(k) Plan
333-09733	Form S-8 Registration Statement – STERIS Corporation 401(k) Plan

Cleveland, Ohio June 26, 2007 /s/ ERNST & YOUNG LLP