UNITED STATES 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

(Mark One)

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

For the fiscal year ended December 31, 2009

OR

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

For the transition period from to

Commission File Number: 000-18592

Full title of the plan and name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

Merit Medical Systems, Inc.

1600 West Merit Parkway South Jordan, UT 84095

Merit Medical Systems, Inc. 401(k) Profit Sharing Plan

Financial Statements as of December 31, 2009 and 2008, and for the Year Ended December 31, 2009, Supplemental Schedule as of December 31, 2009, and Report of Independent Registered Public Accounting Firm

Merit Medical Systems, Inc. 401(k) Profit Sharing Plan

Financial Statements as of December 31, 2009 and 2008, and for the Year Ended December 31, 2009, Supplemental Schedule as of December 31, 2009, and Report of Independent Registered Public Accounting Firm

MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

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NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Trustees and Participants of Merit Medical Systems, Inc. 401(k) Profit Sharing Plan South Jordan, Utah

We have audited the accompanying statements of net assets available for benefits of the Merit Medical Systems, Inc. 401(k) Profit Sharing Plan (the "Plan") as of December 31, 2009 and 2008, and the related statement of changes in net assets available for benefits for the year ended December 31, 2009. 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 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. The Plan is not required to have, nor were we engaged to perform, an audit of its 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 reporting. Accordingly, 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2009 and 2008, and the changes in net assets available for benefits for the year ended December 31, 2009, in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2009, is presented for the purpose of additional analysis and is not a required part of the basic 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 schedule is the responsibility of the Plan's management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2009 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ Deloitte & Touche LLP

Salt Lake City, Utah June 28, 2010

MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS AS OF DECEMBER 31, 2009 AND 2008

| | 2009 | 2008 |
|--|------------------|------------------|
| | | |
| ASSETS: | | |
| Cash | \$ 6,337 | \$ 21,051 |
| | | |
| Investments | 42,873,986 | 34,152,382 |
| | | |
| Receivables: | | |
| Employer contributions Employer Contributions | 42,716 | 22,338 |
| Participant contributions | 14,655 | 73,175 |
| | | |
| Total receivables | 57,371 | 95,513 |
| | | |
| Total assets | 42,937,694 | 34,268,946 |
| | | |
| LIABILITIES: | | |
| Accounts payable | 12,230 | 31,827 |
| Excess contributions payable | 198,873 | |
| | | |
| Total liabilities | 211,103 | 31,827 |
| | | |
| NET ASSETS AVAILABLE FOR BENEFITS AT FAIR VALUE | 42,726,591 | 34,237,119 |
| | | |
| ADJUSTMENT FROM FAIR VALUE TO CONTRACT VALUE FOR COMMON COLLECTIVE TRUST | (7,581) | 73,531 |
| | | |
| NET ASSETS AVAILABLE FOR BENEFITS | \$ 42,719,010 | \$ 34,310,650 |
| | | |
| See notes to financial statements. | | |
| | | |

MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS FOR THE YEAR ENDED DECEMBER 31, 2009

| CONTRIBUTIONS: | | |
|---|----|-------------|
| Employer contributions | \$ | 775,605 |
| Participant contributions | | 2,765,492 |
| Rollover contributions | | 240,691 |
| | | _ |
| Total contributions | | 3,781,788 |
| | | _ |
| INVESTMENT INCOME: | | |
| Net appreciation in fair value of investments | | 5,542,611 |
| Interest and dividends | | 102,795 |
| | | |
| Total investment income | | 5,645,406 |
| | | _ |
| DEDUCTIONS: | | |
| Benefits paid to participants | | (969,752) |
| Administrative expenses | | (49,082) |
| | | |
| Total deductions | | (1,018,834) |
| | | _ |
| INCREASE IN NET ASSETS AVAILABLE FOR BENEFITS | | 8,408,360 |
| | | |
| NET ASSETS AVAILABLE FOR BENEFITS: | | |
| Beginning of year | | 34,310,650 |
| | | |
| End of year | \$ | 42,719,010 |
| | - | |
| See notes to financial statements. | | |
| | | |

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MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS AS OF DECEMBER 31, 2009 AND 2008, AND FOR THE YEAR ENDED DECEMBER 31, 2009

1. DESCRIPTION OF THE PLAN

The following description of the Merit Medical Systems, Inc. 401(k) Profit Sharing Plan (the "Plan") is provided for general information purposes only. Reference should be made to the Plan document for more complete information.

General — The Plan is a defined contribution plan covering substantially all employees who have completed 90 days of service of Merit Medical Systems, Inc. (the "Company"). The Plan is administered by a trustee who has been appointed by the board of directors of the Company. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Contributions — Each year, participants may contribute up to 100% of their pretax annual compensation, as defined in the Plan, subject to certain Internal Revenue Code (IRC) limitations. The Company contributes, on a discretionary basis, 75% of the first 2%, and 25% of the next 3% of base compensation that a participant contributes to the Plan.

Participant Accounts — Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's contribution and the Company's matching contribution and charged with withdrawals and an allocation of Plan earnings or losses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Investments — Participants direct the investment of their contributions and Company contributions into various investment options offered by the Plan.

Vesting — Participants are vested immediately in their contributions plus actual earnings thereon. Vesting in the Company's contribution portion of their accounts is based on years of continuous service. A participant vests 20% a year of credited service and is 100% vested after five years of credited service.

Participant Loans — Participants may borrow from their accounts up to a maximum of \$50,000 or 50% of their account balance, whichever is less. The loans are secured by the balance in the participant's account and bear interest at rates commensurate with local prevailing rates at the time funds are borrowed as determined quarterly by the Plan administrator. Principal and interest are paid ratably through payroll deductions.

Payment of Benefits — On termination of service due to death, disability or retirement, a participant may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account or annual installments over a ten-year period. For termination of service for other reasons, a participant may receive the value of the vested interest in his or her account as a lump-sum distribution.

Forfeited Accounts — At December 31, 2009 and 2008, forfeited nonvested accounts totaled \$19,700 and \$123,044, respectively. These accounts may be used to reduce future employer contributions. During the year ended December 31, 2009, forfeited nonvested accounts totaling \$114,366 were used to reduce employer contributions.

Administrative Expenses — Administrative expenses of the Plan are paid by the Company as provided in the Plan document.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The accompanying financial statements have been prepared in accordance 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 Plan management to make estimates and assumptions that affect the reported amounts of net assets available for benefits and changes therein. Actual results could differ from those estimates.

Risk and Uncertainties — The Plan utilizes various investment instruments, including mutual funds. Investment securities, in general, are exposed to various risks, such as interest rate, credit and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Benefit-Responsive Investment Contracts — As described in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 962, Plan Accounting—Defined Contribution Pension Plans, fully benefit-responsive investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the plan.

The Plan invests in investment contracts through a collective trust in the Morley Stable Value Fund ("MSV"). As required under ASC 962, the statements of net assets available for benefits presents the investment in the collective trust at fair value with an offsetting adjustment which, when netted against the fair value, will equal contract value. The weighted average yield of the underlying investments in the MSV Fund for the year ended December 31, 2009, was 2.3%.

Payment of Benefits — Benefit payments to participants are recorded upon distribution. There were no amounts allocated to accounts of persons who have elected to withdraw from the Plan but have not yet been paid at December 31, 2009 and 2008.

Excess Contributions Payable — The Plan is required to return contributions received during the Plan year in excess of IRC limits.

Investment Valuation and Income Recognition — The Plan's investments are stated at fair value. Quoted market prices are used to value investments. Shares of mutual funds are valued at quoted market prices, which represent the asset value of shares held by the Plan at year end. The Plan's interest in the collective trust is valued based on information reported by the investment advisor using the audited financial statements of the collective trust at year-end. Participant loans are valued at the outstanding loan balances, which approximates 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 exdividend date.

Management fees and operating expenses charged to the Plan for investments in mutual funds are deducted from income earned on a daily basis and are not separately reflected. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

Recent Accounting Pronouncements — In April 2009, the FASB issued guidance under ASC 820, Fair Value Measurements and Disclosures, which reaffirms that fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions. The guidance also reaffirms the need to use judgment in determining if a formerly active market has become inactive and in determining fair values when the market has become inactive. This Plan adopted this guidance during 2009, the adoption of which did not have a material impact on the Plan's financial statements.

In May 2009, the FASB issued guidance under ASC 855, Subsequent Events, which provides guidance on the assessment of subsequent events. This guidance defines the period after the balance sheet date during which we should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements and the required disclosures for such events. The guidance is effective for interim or annual reporting periods ending after June 15, 2009. The Plan adopted this guidance during 2009, the adoption of which did not have a material impact on the Plan's financial statements.

In June 2009, the FASB issued guidance under ASC 105, Generally Accepted Accounting Principles. This guidance establishes the FASB Accounting Standards Codification (the "Codification") as the source of authoritative U.S. generally accepted accounting principles ("GAAP") for nongovernmental entities. The Codification supersedes all existing non-Securities and Exchange Commission ("SEC") accounting and reporting standards. Rules and interpretive releases of the SEC under authority of federal security laws remain authoritative GAAP for SEC registrants. This guidance and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. As the Codification did not change existing GAAP, the adoption of this guidance by the Plan during 2009 did not have an impact on the Plan's financial condition or results of operations.

In September 2009, the FASB issued ASC Update 2009-12, Fair Value Measurements and Disclosures (Topic 820) — Investment in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent). This update provides guidance on estimating the fair value of a company's investments in investment companies when the investment does not have a readily determinable fair value. It permits the use of the investment's net asset value as a practical expedient to determine fair value. This guidance also required additional disclosure of the attributes of these investments such as: (i) the nature of any restrictions on the reporting entity's ability to redeem its investment; (ii) unfunded commitments; and (iii) investment strategies of the investees. This guidance is effective for periods ending after December 15, 2009. The Plan adopted this guidance during 2009, the adoption of which did not have a material impact on the Plan's financial condition or results of operations and all applicable disclosures are included in these financial statements.

In January 2010, the FASB issued ASC Update 2010-06, Fair Value Measurements and Disclosures (Topic 820) — Improving Disclosures about Fair Value Measurements. This guidance requires: (i) separate disclosure of significant transfers between Level 1 and Level 2 and reasons for the transfers; (ii) disclosure, on a gross basis, of purchases, sales, issuances, and net settlements within Level 3; (iii) disclosures by class of assets and liabilities; and (iv) a description of the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. This guidance is effective for reporting periods beginning after December 15, 2009, except for the Level 3 disclosure requirements, which will be effective for fiscal years beginning after December 15, 2010 and interim periods within those fiscal years with early adoption permitted. Plan management does not expect the adoption of this guidance to have a material impact on the Plan's financial statements.

3. FAIR VALUE MEASUREMENTS

Effective January 1, 2008, the Plan adopted guidance under ASC 820, Fair Value Measurements and Disclosures. This guidance does not determine or affect the circumstances under which fair value

measurements are used, but defines fair value, expands disclosure requirements around fair value and specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Plan's market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 — Quoted prices for identical instruments in active markets.

Level 2 — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 — Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

This hierarchy requires the Plan to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2009 and 2008.

Interest bearing cash — Valued based on quoted market prices in active markets.

Mutual funds — Valued based on quoted market prices in active markets.

Common collective trust — Valued based on the value of the underlying securities.

Merit Medical Systems, Inc. common stock — Valued based on quoted market prices in active markets.

Participant loans — Valued based on their exit value when collected or by deemed distributions if they are not repaid.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

As required by ASC 820, assets are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table presents the financial assets the Plan measures at fair value on a recurring basis as of December 31, 2009. This table includes the major categorization for securities on the basis of the nature and risk of the investments as December 31, 2009, in accordance with the update to ASC 820 (originally issued as FASB Staff Position No. 157-4).

| Description | Level 1 | Level 2 | Level 3 | Total |
|--|------------------|-----------------|-----------------|------------------|
| Interest bearing cash | \$ 2,620,707 | \$ _ | \$ _ | \$ 2,620,707 |
| Mutual funds: | | | | |
| Intermediate Investments Grade | 5,819,483 | | | 5,819,483 |
| Large-Cap Growth Funds | 2,408,826 | | | 2,408,826 |
| Treasury Inflated Protected Securities | 2,367,392 | | | 2,367,392 |
| International Large-Cap Core | 1,343,316 | | | 1,343,316 |
| Small-Cap Growth Funds | 1,210,440 | | | 1,210,440 |
| Mid-Cap Value | 1,054,753 | | | 1,054,753 |
| Small-Cap Core Funds | 1,011,599 | | | 1,011,599 |
| Large-Cap Core Funds | 981,393 | | | 981,393 |
| Global Natural Resources Funds | 875,549 | | | 875,549 |
| S&P 500 Index Objective Funds | 833,516 | | | 833,516 |
| International Multi-Cap Growth | 552,077 | | | 552,077 |
| International Multi-Cap Core | 551,125 | | | 551,125 |
| Mid-Cap Core Funds | 548,726 | | | 548,726 |
| Large-Cap Value Funds | 473,156 | | | 473,156 |
| Mid-Cap Growth Funds | 456,679 | | | 456,679 |
| Global Small-/Mid-Cap Funds | 422,190 | | | 422,190 |
| Emerging Markets Funds | 269,381 | | | 269,381 |
| Global Science/Technology Funds | 115,256 | | | 115,256 |
| Multi-Cap Core Funds | 32,280 | | | 32,280 |
| Common collective trust | | 1,620,592 | | 1,620,592 |
| Merit Medical Systems, Inc. | | | | |
| common stock | 15,634,501 | | | 15,634,501 |
| Participant loans | | | 1,671,050 | 1,671,050 |
| Investments — at fair value | \$ 39,582,344 | \$ 1,620,592 | \$ 1,671,050 | \$ 42,873,986 |

The following table presents the financial assets the Plan measures at fair value on a recurring basis as of December 31, 2008:

| Description | Level 1 | Level 2 | | Level 3 | _ | Total |
|-----------------------------|------------------|-----------------|----|-----------|----|------------|
| Interest bearing cash | \$ 2,311,200 | \$ _ | \$ | _ | \$ | 2,311,200 |
| Mutual funds | 14,502,386 | | | | | 14,502,386 |
| Common collective trust | | 1,346,002 | | | | 1,346,002 |
| Merit Medical Systems, Inc. | | | | | | |
| common stock | 14,363,418 | | | | | 14,363,418 |
| Participant loans | | | | 1,629,376 | | 1,629,376 |
| • | | | _ | | | |
| Investments — at fair value | \$ 31,177,004 | \$ 1,346,002 | \$ | 1,629,376 | \$ | 34,152,382 |

The table below sets forth a summary of changes in the fair value of the Plan's Level 3 assets for the year ended December 31, 2009:

| Participant loans: | |
|---------------------------------------|-----------------|
| Balance — beginning of year | \$ 1,629,376 |
| Loan repayments and withdrawals — net | 41,674 |
| | |
| Balance — end of year | \$ 1,671,050 |

The table below sets forth a summary of changes in the fair value of the Plan's Level 3 assets for the year ended December 31, 2008:

| \$ 1,657,864 |
|-----------------|
| (28,488) |
| |
| \$ 1,629,376 |
| \$ |

4. INVESTMENTS

The Plan's investments that represented 5% or more of the Plan's net assets available for benefits are as follows as of December 31, 2009 and 2008:

| | 2009 | | 2008 |
|--|------|------------|------------------|
| | | | |
| Merit Medical Systems, Inc. Common Stock, 812,604 and 801,083 shares, respectively | \$ | 15,634,501 | \$ 14,363,418 |
| PIMCO Total Return; Administrative Class Shares 538,841 and 303,889 shares, respectively | | 5,819,483 | 3,081,432 |
| Fidelity Spartan Money Market Fund, 2,618,533 and 2,299,950 shares, respectively | | 2,618,533 | 2,299,950 |
| AM Century Inflation Adjusted Bond Fund IV, 2009 — 205,860 shares | | 2,367,392 | * |
| Columbia Marsico Focused Equity Fund; Class Z Shares, 2008 —115,859 shares | | * | 1,742,527 |

^{*} This investment did not represent 5% or more of the fair value of the Plan's net assets as of December 31, 2009 or 2008.

During the year ended December 31, 2009, the Plan's common stock and mutual fund investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value as follows:

| AM Century Inflation Adjusted Bond Fund IV | \$ 186,075 |
|--|-----------------|
| Artisan International; Investor Shares | 126,170 |
| Baron Asset Fund | 128,637 |
| Columbia Marsico Focused Equity Fund; Class Z Shares | 208,545 |
| Edgewood Growth Fund | 57,365 |
| Fidelity Spartan US Equity Index Fund; Investor Class Shares | 158,352 |
| Harbor International Fund; Investor Class Shares | 178,332 |
| Hartford Mid Cap; Class A Shares | 59,446 |
| MainStay ICAP Select Equity; Class 1 Shares | 83,827 |
| Merit Medical System, Inc. Common Stock | 1,499,301 |
| Morley Stable Value | 29,544 |
| Nations Marsico Focus Equities Fund; Investor A Shares | 135,321 |
| Oakmark Fund; Class 1 Shares | 419,428 |
| Oakmark International Fund; Class 1 Shares | 195,340 |
| PIMCO Developing Local Markets; Administrative Class Shares | 14 |
| PIMCO Emerging Local Bond Fund; Administrative Class Shares | 21 |
| PIMCO Real Return Fund; Administrative Class Shares | (1,687) |
| PIMCO Total Return Fund; Administrative Class Shares | 603,467 |
| RS Global Natural Resources | 226,761 |
| RS Technology Fund; Class A Shares | 26,754 |
| RS Value Fund; Class A Shares | 1,155 |
| T Rowe Price International Funds, Inc. Emerging Markets Stock Fund | 61,036 |
| Wasatch Small Cap Growth Fund | 372,040 |
| Wasatch Small Cap Value Fund | 365,493 |
| Wasatch Global Oppurtunities Retail | 51,222 |
| Wells Fargo C&B Mid Cap Value; Class D Shares | 230,093 |
| Wells Fargo Advantage Ultra Short-term Municipal Income Fund | (646) |
| William Blair International Growth Fund; Class N Shares | 141,207 |
| | |
| Net appreciation in fair value of investments | \$ 5,542,611 |
| ** | |

5. RELATED PARTY TRANSACTIONS

At December 31, 2009 and 2008, the Plan held 812,604 and 801,083 shares, respectively, of the Company's common stock, with a fair value of \$15,634,501 and \$14,363,418, respectively.

6. PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, participants would become 100% vested in their accounts.

7. FEDERAL INCOME TAX STATUS

The Internal Revenue Service has determined and informed the Company by a letter dated April 10, 2002, that the Plan was designed in accordance with the applicable regulations of the Internal Revenue Code. The Plan has been amended since receiving the determination letter; however, the Company and the Plan administrator believe that the Plan is currently designed and operated in compliance with the

applicable requirements of the Internal Revenue Code and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

8. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500 at December 31, 2009 and 2008:

| | | 2009 | 2008 |
|---|----|------------|------------------|
| Statement of net assets available for benefits: | | | |
| Net assets available for benefits per the financial statements | \$ | 42,719,010 | \$ 34,310,650 |
| Adjustment from contract value to fair value for common collective trusts | | 7,581 | (73,531) |
| | · | <u>.</u> | |
| Net assets available for benefits per Form 5500 | \$ | 42,726,591 | \$ 34,237,119 |

For the year ended December 31, 2009, the following is a reconciliation of total investment income per the financial statements to the Form 5500:

| Statement of changes in net assets available for benefits: | |
|--|-----------------|
| Increase in net assets available for benefits per the financial statements | \$ 8,408,360 |
| Adjustment from contract value to fair value for common collective trusts | 81,112 |
| | |
| Increase in net assets available for benefits per Form 5500 | \$ 8,489,472 |

SUPPLEMENTAL SCHEDULE

MERIT MEDICAL SYSTEMS, INC. 401(k) PROFIT SHARING PLAN

FORM 5500, SCHEDULE H, PART IV, LINE 4i — SCHEDULE OF ASSETS (HELD AT END OF YEAR) AS OF DECEMBER 31, 2009

| | Identity of Issue, Borrower, Lessor or Similar Party | Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value | Cost | Fair Value |
|---|---|---|------|-------------------|
| | AM Century Inflation Adjusted Bond Fund IV | Registered Investment Company | ** | \$ 2,367,392 |
| | Artisan International; Investor Shares | Registered Investment Company | ** | 501,562 |
| | Baron Asset Fund | Registered Investment Company | ** | 456,679 |
| | Columbia Marsico Focused Equity Fund; Class Z Shares | Registered Investment Company | ** | 845,323 |
| | Edgewood Growth Fund | Registered Investment Company | ** | 1,025,969 |
| | Fidelity Cash Reserves | Registered Investment Company | ** | 5 |
| | Fidelity Spartan Money Market Fund | Registered Investment Company | ** | 2,618,533 |
| | Fidelity Spartan US Equity Index; Investor Class Shares | Registered Investment Company | ** | 833,516 |
| | Fidelity FMMT Retirement Money Market | Registered Investment Company | ** | 2,170 |
| | Harbor International Fund; Investor Class Shares | Registered Investment Company | ** | 841,753 |
| | Hartford Mid Cap; Class A Shares | Registered Investment Company | ** | 548,726 |
| | MainStay ICAP Select Equity; Class 1 Shares | Registered Investment Company | ** | 473,156 |
| * | Merit Medical Systems, Inc. Common Stock | Common Stock (812,604 shares) | ** | 15,634,501 |
| | Morley Stable Value | Common Collective Fund (72,593 units) | *** | 1,620,592 |
| | Oakmark Fund; Class I Shares | Registered Investment Company | ** | 981,393 |
| | Oakmark International Fund; Class 1 Shares | Registered Investment Company | ** | 551,125 |
| | Marsico Focus | Registered Investment Company | ** | 537,534 |
| | PIMCO Total Return Fund; Administrative Class Shares | Registered Investment Company | ** | 5,819,483 |
| | RS Global Natural Resources | Registered Investment Company | ** | 875,549 |
| | RS Value Fund; Class A Shares | Registered Investment Company | ** | 32,280 |
| | RS Technology Fund; Class A Shares | Registered Investment Company | ** | 115,256 |
| | T Rowe Price International Funds, Inc. Emerging Markets | | ** | |
| | Stock Fund | Registered Investment Company | | 269,381 |
| | Wasatch Small Cap Growth Fund | Registered Investment Company | ** | 1,210,440 |
| | Wasatch Small Cap Value Fund | Registered Investment Company | ** | 1,011,599 |
| | Wasatch Global Opportunities Retail | Registered Investment Company | ** | 422,190 |
| | Wells Fargo C&B Mid Cap Value; Class D Shares | Registered Investment Company | ** | 1,054,753 |
| | William Blair International Growth Fund; Class N Shares | Registered Investment Company | ** | 552,077 |
| * | Participant Loans | Participant loans (maturing 2010 to 2017 at interest rates of 4.25% to 9.25%) | | 1,671,050 |
| | TOTAL | | | \$ 42,873,986 |

^{*} Party-in-interest

^{**} Cost information is not required for participant-directed investments and, therefore, is not included.

*** Represents a fully benefit-responsive investment contract.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustee (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Merit Medical Systems, Inc 401(k) Retirement Savings Plan

Date: June 28, 2010

/s/ Kent W. Stanger

Kent W. Stanger Member, 401 (k) Plan Administration and Investment Committee

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-163104, 333-135614, 333-129267, 333-116365, 333-58162, and 333-92053 on Forms S-8 of our report dated June 25, 2010, relating to the financial statements and supplemental schedule of the Merit Medical Systems, Inc. 401(k) Profit Share Plan, appearing in this Annual Report on Form 11-K of Merit Medical Systems, Inc. 401(k) Profit Sharing Plan for the year ended December 31, 2009.

/s/ Deloitte & Touche LLP

Salt Lake City, Utah June 28, 2010