

THORATEC CORP
Form DEF 14A
April 15, 2009

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

Thoratec Corporation

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
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(1) Title of each class of securities to which transaction applies:

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- o Fee paid previously with preliminary materials.
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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

April 15, 2009

Dear Shareholder:

You are cordially invited to attend the Thoratec Corporation 2009 Annual Meeting of Shareholders to be held on Wednesday, May 13, 2009 at 8:00 a.m., Pacific Daylight Time, at our executive offices located at 6101 Stoneridge Drive, Pleasanton, California 94588. Details regarding the meeting and the business to be conducted are more fully described in the accompanying Notice of Annual Meeting of Shareholders and Proxy Statement.

Your vote is very important. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. You may vote in person at the meeting or by mail, by telephone or over the Internet. Your vote by written proxy, by telephone or over the Internet will ensure your representation at the Annual Meeting if you cannot attend in person. Please review the instructions on the proxy card regarding your voting options.

Thank you for your ongoing support of and continued interest in Thoratec Corporation.

Very truly yours,

Gerhard F. Burbach
President and Chief Executive Officer

Corporate Headquarters

Thoratec Corporation, 6035 Stoneridge Drive, Pleasanton, CA 94588
Tel 925-847-8600 Fax 925-847-8574 www.thoratec.com

THORATEC CORPORATION

**NOTICE OF 2009 ANNUAL MEETING OF SHAREHOLDERS
To Be Held on May 13, 2009**

To the Shareholders of Thoratec Corporation:

NOTICE IS HEREBY GIVEN, that the 2009 Annual Meeting of Shareholders of Thoratec Corporation, a California corporation (Thoratec or the Company), will be held on Wednesday, May 13, 2009 at 8:00 a.m., Pacific Daylight Time, at our executive offices located at 6101 Stoneridge Drive, Pleasanton, California 94588 for the following purposes:

To elect eight directors to serve for the ensuing year or until their successors are elected and qualified;

To ratify the appointment of Deloitte & Touche LLP as independent auditors of the Company for its fiscal year ending January 2, 2010; and

To transact such other business as may properly come before the meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice. Only shareholders of record at the close of business on April 6, 2009 are entitled to notice of, to attend and to vote at the meeting and any adjournments thereof. All shareholders are cordially invited to attend the meeting in person. Any shareholder attending the meeting may vote in person even if such shareholder previously signed and returned a proxy. If you own shares through a broker, and you wish to attend and vote in person at the meeting, you must obtain from your broker a proxy issued in your name.

Important Notice Regarding the Availability of Proxy Materials for the 2009 Annual Meeting of Shareholders to be Held on May 13, 2009.

The Proxy Statement, the Proxy Card, and the Annual Report to Shareholders are available at <http://phx.corporate-ir.net/phoenix.zhtml?c=95989&p=proxy>.

For the Board of Directors

David A. Lehman
Senior Vice President, General Counsel and Secretary

Pleasanton, California
April 15, 2009

IMPORTANT: WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING, PLEASE COMPLETE, DATE AND SIGN THE ENCLOSED PROXY AND MAIL IT PROMPTLY IN THE ENCLOSED POSTAGE PAID ENVELOPE OR VOTE BY TELEPHONE OR THROUGH THE INTERNET ACCORDING TO THE

INSTRUCTIONS INCLUDED WITH THE PROXY CARD.

THORATEC CORPORATION

**PROXY STATEMENT
FOR 2009 ANNUAL MEETING OF SHAREHOLDERS**

The Board of Directors of Thoratec Corporation, a California corporation (*Thoratec* or the *Company*), is furnishing this Proxy Statement to you in connection with our solicitation of proxies to be used at our 2009 Annual Meeting of Shareholders to be held on Wednesday, May 13, 2009 at 8:00 a.m., Pacific Daylight Time, or at any adjournments or postponements thereof (the *Annual Meeting*), for the purposes set forth in this Proxy Statement and in the accompanying Notice of 2009 Annual Meeting of Shareholders. The Annual Meeting will be held at our principal executive offices located at 6101 Stoneridge Drive, Pleasanton, California 94588. The telephone number at that address is (925) 847-8600.

The date of this Proxy Statement is April 15, 2009 and it was mailed on or about April 15, 2009 to all shareholders entitled to vote at the Annual Meeting.

INFORMATION CONCERNING SOLICITATION AND VOTING

Record Date and Shares Outstanding

Shareholders of record at the close of business on April 6, 2009 (the *Record Date*), are entitled to notice of, and to vote at, the Annual Meeting. As of the Record Date, 56,367,072 shares of the Company's common stock (*Common Stock*) were outstanding. The Company's Common Stock is listed on the NASDAQ Global Select Market.

Voting

Every shareholder voting for the election of directors may exercise cumulative voting rights and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which the shareholder's shares held of record on the Record Date are entitled or, alternatively, distribute such shareholder's votes on the same principle among as many candidates as the shareholder may select, provided that votes cannot be cast for more than eight candidates. However, no shareholder will be entitled to cumulate votes for a candidate unless the candidate's name has been placed in nomination prior to the voting and the shareholder, or any other shareholder, has given notice at the meeting prior to the voting of the intention to cumulate votes. On all other matters, each share is entitled to one vote on each proposal that properly comes before the Annual Meeting.

Methods of Voting

You may vote by mail, by telephone, over the Internet or in person at the meeting.

Voting by Mail. By signing and returning the proxy card in the enclosed prepaid and addressed envelope, you are authorizing individuals named on the proxy card (known as *proxies*) to vote your shares at the meeting in the manner you indicate. We encourage you to sign and return the proxy card even if you plan to attend the meeting. In this way, your shares will be voted if you are unable to attend the meeting. If you received more than one proxy card, it is an indication that your shares are held in multiple accounts. Please sign and return all proxy cards to ensure that all of

your shares are voted.

Voting by Telephone. To vote by telephone, please follow the instructions included with your proxy card. If you vote by telephone, you do not need to complete and mail your proxy card. If you received the proxy materials over the Internet, please follow the voting instructions you will receive by e-mail on about April 15, 2009.

Voting over the Internet. To vote over the Internet, please follow the instructions included with your proxy card. If you vote over the Internet, you do not need to complete and mail your proxy card. If you received the proxy

materials over the Internet, please follow the voting instructions you will receive by e-mail on our about April 15, 2009.

Voting in Person. If you plan to attend the meeting and vote in person, we will provide you with a ballot at the meeting. If your shares are registered directly in your name, that is, you hold a share certificate, you are considered the shareholder of record and you have the right to vote in person at the meeting. If your shares are held in the name of your broker or other nominee, you are considered the beneficial owner of shares held in street name. As a beneficial owner, if you wish to vote at the meeting, you will need to bring with you to the meeting a legal proxy from your broker or other nominee authorizing you to vote such shares. Contact your broker or other record holder of the shares for assistance if this applies to you.

Quorum; Abstentions; Broker Non-Votes

The presence in person or by proxy of a majority of the shares of Common Stock outstanding and entitled to vote on the record date is required for a quorum at the Annual Meeting. Both abstentions and broker non-votes are counted as present for purposes of determining the presence of a quorum, but broker non-votes will not be counted towards the tabulation of votes cast on proposals presented to shareholders.

Broker non-votes include shares for which a bank, broker or other nominee (i.e., record) holder has not received voting instructions from the beneficial owner and for which the nominee holder does not have discretionary power to vote on a particular matter. Under the rules that govern brokers who are record owners of shares that are held in brokerage accounts for the beneficial owners of the shares, brokers who do not receive voting instructions from their clients have the discretion to vote uninstructed shares on routine matters but have no discretion to vote the uninstructed shares on non-routine matters. The proposals to be voted on at the Annual Meeting, the election of directors and the ratification of our independent auditors, are both routine matters.

Vote Required

The election of directors at the Annual Meeting requires the affirmative vote of a plurality of the votes cast at the Annual Meeting.

Each other item to be voted on at the Annual Meeting requires the affirmative vote of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting.

All votes will be tabulated by the inspector of elections appointed for the Annual Meeting. The inspector of elections will separately tabulate affirmative and negative votes, abstentions and broker non-votes. David A. Lehman, Senior Vice President, General Counsel and Secretary of the Company, has been appointed as the inspector of elections for the Annual Meeting.

Revocability of Proxies

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by delivering to our Corporate Secretary a written notice of revocation or a duly executed proxy bearing a later date or by attending the Annual Meeting and voting in person. Your presence at the Annual Meeting will not in and of itself be sufficient to revoke your proxy.

Solicitation of Proxies

The cost of soliciting proxies in connection with this Proxy Statement has been or will be borne by us. In addition to solicitation by mail, we may request that banks, brokers and other custodians, nominees and fiduciaries send Proxy Statements to the beneficial owners of Common Stock. We may reimburse these banks, brokers and other custodians, nominees, fiduciaries and other persons representing beneficial owners of Common Stock for their expenses in forwarding solicitation material to such beneficial owners. Some of our directors, officers and other employees may, without additional compensation, solicit proxies personally, or by telephone, facsimile or e-mail.

Availability of Proxy Materials

This Proxy Statement, our Annual Report, and the form of Proxy Card are available on the internet at <http://phx.corporate-ir.net/phoenix.zhtml?c=95989&p=proxy>. Each of these documents can be viewed online or printed and will remain available through the conclusion of the Annual Meeting.

Householding of Annual Disclosure Documents

The Securities and Exchange Commission (the SEC) has approved a rule governing the delivery of annual disclosure documents. This rule allows us to send a single set of our Annual Report and Proxy Statement to any household at which two or more Thoratec shareholders reside if we believe that the shareholders are members of the same family. Some banks, brokers and other intermediaries may be participating in this practice of householding proxy statements and annual reports. If you and others who share your mailing address own Common Stock in street name, meaning through bank or brokerage accounts, you may have received a notice that your household will receive only one annual report and proxy statement from each company whose stock is held in such accounts. Unless you responded that you did not want to participate in householding, a single copy of this Proxy Statement and the 2008 Annual Report have been sent to your address. This rule benefits both our shareholders and us. It reduces the volume of duplicate information received at a shareholder's house and helps reduce our expenses. Each shareholder, however, will continue to receive individual proxy cards or voting instruction forms.

If your household has previously received a single set of disclosure documents, but you would prefer to receive your own copy this year or in future years, you should contact your bank, broker or other nominee record holder. We can also deliver a separate copy of either our Annual Report or Proxy Statement to any shareholder upon either written request to Thoratec Corporation, 6035 Stoneridge Drive, Pleasanton, California 94588, Attention: Corporate Secretary, or upon oral request by calling (925) 847-8600. Similarly, if you share an address with another Thoratec shareholder and together both of you wish to receive only a single set of our annual disclosure documents, please follow the same instructions. In addition, copies of our SEC filings and certain other submissions are made available free of charge on the investor relations page of our website at www.thoratec.com as soon as practicable after electronically filing or furnishing these documents with the SEC.

BOARD OF DIRECTORS STRUCTURE AND COMPENSATION

Structure and Committees

The current members of our Board of Directors (the Board) are Gerhard F. Burbach, Howard E. Chase, J. Daniel Cole, Steven H. Collis, Neil F. Dimick, Elisha W. Finney, D. Keith Grossman, J. Donald Hill, M.D., and Daniel M. Mulvena. Mr. Dimick serves as Chairman of the Board and Dr. Hill serves as Vice-Chairman of the Board. Mr. Chase and Dr. Hill will not stand for re-election at the Annual Meeting pursuant to the retirement age provision of our Corporate Governance Guidelines. Paul LaViolette has been nominated for election to the Board to fill one of the resulting vacancies in the Board. The Board held a total of ten meetings during our 2008 fiscal year, which ended on January 3, 2009. During the 2008 fiscal year, the Board had an Audit Committee, a Compensation and Option Committee, and a Corporate Governance and Nominating Committee. Each director other than Mr. Grossman attended at least 75% of the aggregate number of meetings of the Board and the committees on which he or she served. Mr. Grossman attended seven out of the ten meetings of the Board, including all regularly scheduled, in-person, quarterly meetings. While the Company encourages all members of the Board to attend the annual meetings of shareholders, there is no formal policy as to their attendance at annual meetings. All sitting members of the Board attended the 2008 Annual Meeting of Shareholders.

The Board has determined that each of the current directors standing for re-election is an independent director, as defined by The Nasdaq Stock Market, Inc. (NASDAQ) corporate governance listing standards and Rule 10A-3 of the Securities Exchange Act of 1934, as amended (the Exchange Act), except for Gerhard F. Burbach, who serves as our President and Chief Executive Officer. In addition, the Board has determined that, upon election, Paul LaViolette would be an independent director in accordance with the foregoing standards. The Board annually evaluates the independence of its members. A director will not qualify as independent unless the Board

affirmatively determines that the director has no material relationship with the Company. In making its determination, the Board considers business and other applicable relationships in accordance with the director independence standards of NASDAQ, as currently in effect. The Board has also determined that all members of the Board's committees are independent of the Company under the director independence standards of NASDAQ. In addition, our independent directors meet in regularly scheduled executive sessions throughout the year.

Audit Committee

Our Audit Committee met nine times during fiscal 2008. The current members of this committee are Ms. Finney and Messrs. Cole and Dimick, with Ms. Finney serving as Chairwoman. This committee operates under a written charter adopted by our Board. The Audit Committee reviews and reassesses the charter at least annually, and the charter was last amended in May 2007.

The Board has determined that two members of the Audit Committee, Mr. Dimick and Ms. Finney, are audit committee financial experts, as that term is defined under Section 407 of the Sarbanes-Oxley Act of 2002 and the rules promulgated by the SEC in furtherance of Section 407. As described above, Mr. Dimick and Ms. Finney are independent directors. The purposes of our Audit Committee include:

- Overseeing our accounting and financial reporting process;
- Overseeing the audits of our financial statements;
- Overseeing our relationship with our independent auditors; and
- Overseeing our system of internal controls.

In discharging its duties, our Audit Committee, among its other duties:

- Recommends to the Board the selection of the independent auditors and their compensation, evaluates the independent auditors and, where appropriate, recommends the replacement of the independent auditors;
- Meets with management and the independent auditors to review and discuss the annual financial statements and the report of the independent auditors thereon and, to the extent the independent auditors or management brings any such matters to the attention of the Audit Committee, to discuss significant issues encountered in the course of the audit work, if any, such as restrictions on the scope of activities or access to required information;
- Meets quarterly with management and the independent auditors to review and discuss the quarterly financial statements and review quarterly earnings press releases;
- Reviews significant changes to our accounting principles and practices proposed by the independent auditors or management;
- Meets with management and the independent auditors to review and discuss reports on the adequacy and effectiveness of our internal controls; and
- Reviews and approves all related party transactions.

See Report of the Audit Committee of the Board of Directors below for more information.

Compensation and Option Committee

Our Compensation and Option Committee met five times during fiscal 2008. The current members of this committee are Messrs. Collis and Mulvena and Dr. Hill, with Mr. Mulvena serving as Chairman. This committee operates under a written charter adopted by our Board, which was most recently amended in May 2007. As described above, all members of the Compensation and Option Committee are independent directors. In addition, all Compensation and Option Committee members are outside directors within the meaning of Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code), to allow the Company a tax deduction for certain employee compensation exceeding \$1,000,000 for an individual. All Compensation and Option Committee members are also outside directors within the meaning of Exchange Act Rule 16b-3 to exempt certain option

grants and similar transactions from the short-swing profits prohibition of Section 16 of the Exchange Act. Our Compensation and Option Committee:

Reviews compensation and benefits for our employees generally and for our senior executives specifically, and makes recommendations to the full Board; and

Has authority to grant equity based awards under our 2006 Incentive Stock Plan (the 2006 Plan) to officers, employees and consultants.

Among the Compensation and Option Committee's duties and responsibilities set forth in its charter, the committee has direct responsibility for and authority to (i) review and approve corporate goals and objectives relevant to chief executive officer compensation, evaluate the chief executive officer's performance in light of those goals and objectives, and recommend the chief executive officer's compensation level to the Board based on this evaluation; (ii) develop, review and approve compensation policies and practices applicable to the Company's officers who are deemed to be executive officers of the Company for SEC reporting purposes, including the criteria upon which executive compensation is based, the specific relationship of corporate performance to executive compensation and the composition of benefits; (iii) make recommendations to the Board with respect to the Company's incentive compensation and equity-based compensation plans; (iv) review the compensation and benefits offered to non-employee directors and recommend changes to the Board as appropriate; and (v) administer and evaluate the Company's incentive, equity-based and other executive compensation programs, including approving guidelines, making grants and awards and establishing annual award levels for employee stock options, units, restricted shares and other incentive and equity-based awards under such programs, interpreting and promulgating rules relating to the plans, modifying or canceling grants or awards, designating eligible participants and imposing limitations and conditions on grants or awards.

For each executive officer other than the chief executive officer, the chief executive officer makes recommendations to the committee for annual adjustments to compensation levels and short-term and long-term incentive compensation components, based upon his assessment of each executive officer's performance, retention risks, potential within the organization and the results of benchmarking studies, as described in the Compensation Discussion and Analysis section of this Proxy Statement. The committee reviews with the chief executive officer these assessments and recommendations and determines whether or not to approve and/or modify his recommendations.

Consistent with prior years, an independent compensation consultant, Radford Surveys + Consulting (Radford), was retained by the Committee. The committee requested Radford to prepare competitive benchmarking studies as to, and advise the Committee on, both executive and director compensation, including base salary or fees, cash incentive compensation, and long-term equity incentive compensation for 2008. Radford was engaged by, reported to, and was accountable to the Committee, and the firm was not allowed to conduct any other work for Thoratec without the authorization of the Committee. Radford did not provide any services to Thoratec in 2008 beyond its engagement as an advisor to the Committee. Radford is an independent consultant specializing in compensation matters in the technology industry.

See the discussion in the Compensation Discussion and Analysis section of this Proxy Statement, including the Competitive Benchmarking section, for a full discussion regarding processes and procedures for the determination of executive compensation.

Compensation Committee Interlocks and Insider Participation

During fiscal 2008, none of our executive officers served on the board of directors or compensation committee of another company that had an executive officer serve on our Board or our Compensation and Option Committee. In

addition, none of the members of our Compensation and Option Committee was an officer or employee of Thoratec or any of its subsidiaries during fiscal 2008 or was formerly an officer of Thoratec or any of its subsidiaries at any time in the past.

Corporate Governance and Nominating Committee

Our Corporate Governance and Nominating Committee met five times during fiscal 2008. The current members of this committee are Messrs. Chase, Cole and Dimick, with Mr. Cole serving as Chairman. This committee operates under a written charter adopted by our Board, which was most recently amended in May 2007. The purpose of the Corporate Governance and Nominating Committee is to:

Identify and approve individuals qualified to serve as members of the Board;

Select director nominees for the next annual meeting of shareholders;

Review laws, rules and regulations regarding corporate governance and make appropriate recommendations to the Board; and

Provide oversight with respect to corporate governance and ethical conduct.

Board Compensation

Directors who are employees of Thoratec do not receive additional compensation for serving on the Board or its committees. The following table sets forth the compensation earned by Thoratec's non-employee directors for their service on the Board in 2008.

DIRECTOR COMPENSATION FOR FISCAL 2008

Name	Fees Earned or Paid in	Stock	All Other	Total
	Cash (\$)	Awards(1)(2) (\$)	Compensation (\$)	
Howard E. Chase	36,000	51,635		87,635
J. Daniel Cole	47,000	51,635		98,635
Steven H. Collis	35,000	35,393		70,393
Neil F. Dimick	56,500	51,635		108,135
Elisha W. Finney	48,500	47,588		96,088
D. Keith Grossman	31,000	51,635		82,635
J. Donald Hill, M.D.	42,500	51,635		94,135
Daniel M. Mulvena	44,000	51,635		95,635

(1) At January 3, 2009, Dr. Hill and Messrs. Cole and Dimick held outstanding options to purchase 15,000, 15,000, and 15,000 shares, respectively, and Ms. Finney and Messrs. Chase, Collis, Grossman and Mulvena did not have any outstanding options. The non-employee directors were not granted any options to purchase Common Stock in 2008. At January 3, 2009, Dr. Hill and Messrs. Chase, Cole, Dimick, Grossman, and Mulvena each held 11,250 shares of restricted stock, and Mr. Collis and Ms. Finney each held 10,250 shares of restricted stock.

(2) Stock awards consist of restricted stock grants. Amounts shown do not reflect compensation actually received by the director. Instead, the amounts shown are the dollar amounts recognized by us as compensation expense for financial reporting purposes in 2008 for stock awards pursuant to FAS 123R, excluding estimates of forfeitures

related to service-based vesting conditions. The assumptions made in the valuation of such restricted stock are set forth under Note 11 of the Notes to Consolidated Financial Statements in Thoratec's Annual Report on Form 10-K for the year ended January 3, 2009. The grant date fair value of the restricted stock granted to each non-employee director was equal to the expense recognized for such stock.

For the 2008 fiscal year, all non-employee directors receives a \$25,000 annual retainer and \$1,500 for each quarter in which the director attended one or more Board meetings. Each member of the Audit Committee, other than the Chairperson, received a \$1,000 annual retainer and \$1,500 for each quarter in which the committee member attended one or more Audit Committee meetings. Each member, other than the Chairperson, of the Compensation and Option Committee and the Corporate Governance and Nominating Committee received a \$1,000 annual retainer and \$1,000 for each quarter in which a committee member attended one or more Compensation and Option Committee meetings and Corporate Governance and Nominating Committee meetings, respectively. In addition to

the annual Board retainer, the Chairman of the Board received a \$15,000 annual retainer and the Vice-Chairman of the Board received a \$7,500 annual retainer. In lieu of the annual Audit Committee retainer, the Chairperson of the Audit Committee received a \$15,000 annual retainer; in lieu of the annual Compensation and Option Committee retainer, the Chairperson of the Compensation and Option Committee received a \$10,000 annual retainer; and in lieu of the Corporate Governance and Nominating Committee retainer, the Chairperson of the Corporate Governance and Nominating Committee received a \$5,000 annual retainer. Directors do not receive any additional compensation for actions by unanimous written consent of the Board or any of the committees.

Effective beginning in the 2009 fiscal year, all non-employee directors will receive a \$35,000 annual retainer. Each member of the Audit Committee, other than the Chairperson, will receive a \$10,000 annual retainer. Each member of the Compensation and Option Committee, other than the Chairperson, will receive a \$6,000 annual retainer. Each member of the Corporate Governance and Nominating Committee, other than the Chairperson, will receive a \$4,000 annual retainer. In addition to the annual Board retainer, the Chairperson of the Board will receive a \$15,000 annual retainer and the Vice-Chairman of the Board will receive a \$7,500 annual retainer. In lieu of the annual Audit Committee retainer, the Chairperson of the Audit Committee will receive a \$20,000 annual retainer; in lieu of the annual Compensation and Option Committee retainer, the Chairperson of the Compensation and Option Committee will receive a \$12,000 annual retainer; and in lieu of the Corporate Governance and Nominating Committee retainer, the Chairperson of the Corporate Governance and Nominating Committee will receive an \$8,000 annual retainer. All retainers will continue to be paid on a quarterly basis.

Non-employee directors were eligible to participate in the 2006 Plan. The 2006 Plan provides for the automatic grant of restricted Common Stock to our non-employee directors. The 2006 Plan provides that in addition to any other awards that non-employee directors may be granted, non-employee directors will automatically be granted restricted stock, in the form of either restricted stock bonus awards or restricted stock units, as follows:

Initial award of 7,000 shares of restricted stock (Initial Grant). Such shares will vest in four equal annual installments beginning on the one year anniversary of the effective date of commencement of service as a Board member.

Annual award of 5,000 shares of restricted stock (Annual Grant). Such shares will vest in four equal annual installments such that the award is fully vested after four years. The Annual Grant is granted on the date of the first meeting of the Board following the annual meeting of the Company s shareholders.

The Initial Grant and Annual Grants are made at no cost to the non-employee directors. Mr. Collis received an Initial Grant in March 2008, with a vesting commencement date of January 2, 2008, which had a grant date fair value of \$91,630. Each of the non-employee directors received an Annual Grant of 5,000 shares of restricted stock in May 2008; each such Annual Grant had a grant date fair value of \$71,150.

CODE OF ETHICS AND CORPORATE GOVERNANCE

We have adopted a Code of Ethics that applies to all of our directors, officers and employees, and which meets the requirements of Item 406 of Regulation S-K of the Exchange Act. Our Code of Ethics is available on our investor relations website at www.thoratec.com, under Investor Relations Corporate Governance. The code covers topics, including but not limited to, potential conflicts of interest, compliance with applicable governmental laws, rules and regulations and the reporting of violations of the code. Any amendments to the Code of Ethics will be posted on our website. The Board has the sole authority to approve any waiver of the Code of Ethics relating to the activities of any of our senior financial officers, other executive officers and directors. Any waiver of the Code of Ethics for these individuals will be disclosed promptly on Form 8-K or any other means approved by applicable SEC rules and NASDAQ listing standards.

We have also adopted Corporate Governance Guidelines that provides guidelines for the conduct and operation of the Board, including the composition and selection of members of the Board, role of the Board, orientation and education of directors, conduct of Board meetings, structure and conduct of Board committees, and Board interaction with management, advisors, investors and shareholders. Our Corporate Governance Guidelines are available on our investor relations website at www.thoratec.com, under Investor Relations Corporate Governance.

For information on our corporate governance practices in addition to our Code of Ethics and Corporate Governance Guidelines, including the Company's Compliance Program, the charters approved by the Board for the Audit Committee, the Compensation and Option Committee, and the Corporate Governance and Nominating Committee, and the Audit Committee Complaint Procedures, please visit the Company's investor relations website at www.thoratec.com, under Investor Relations Corporate Governance.

DIRECTOR NOMINATIONS

Criteria for Nomination to the Board

The Corporate Governance and Nominating Committee considers the appropriate balance of experience, skills and personal characteristics required of Board members, and seeks to insure that at least a majority of the directors are independent under the rules of NASDAQ, and that members of the Company's Audit Committee meet the financial literacy and other requirements under NASDAQ rules. While the Corporate Governance and Nominating Committee has not established specific minimum qualifications for director candidates, nominees for director are selected on the basis of their depth and breadth of experience, wisdom, integrity, ability to make independent analytical inquiries, understanding of the Company's business environment, willingness to devote adequate time to Board duties, the interplay of the candidate's experience and skills with those of other Board members, and the extent to which the candidate would be a desirable addition to the Board and any committees of the Board.

Shareholder Recommendations for Director

The Corporate Governance and Nominating Committee will consider written recommendations for director candidates from shareholders. Any such recommendations should be submitted to the Corporate Governance and Nominating Committee, c/o the Corporate Secretary of the Company, and should include the following information: (a) all information relating to the candidate that is required to be disclosed pursuant to Regulation 14A under the Exchange Act (including the person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) the name(s) and address(es) of the shareholder(s) making the recommendation and the number of shares of Common Stock that are owned beneficially and of record by the shareholder(s); and (c) appropriate biographical information and a statement as to the qualifications of the candidate.

Alternatively, shareholders intending to appear at an annual meeting of shareholders in order to nominate a candidate for election by the shareholders at the meeting (in cases where the Board does not intend to nominate the candidate or where the Corporate Governance and Nominating Committee was not requested to consider the candidate) must comply with the procedures in Section 4(c) of the Company's By-Laws. Shareholders can obtain a copy of the Company's By-Laws, without charge, by writing to our Corporate Secretary. Under the Company's By-Laws, and as described under **Deadline for Receipt of Shareholder Proposals** below, written notice of a nomination must be received by our Corporate Secretary no earlier than January 13, 2010 and no later than February 12, 2010 in order to be considered at the 2010 annual meeting of shareholders.

Process for Identifying and Evaluating Director Candidates

The process for identifying and evaluating candidates for the Board is initiated by identifying a slate of candidates who meet the criteria for selection as nominees and have the specific qualities or skills being sought based on input from members of the Board and, if the Corporate Governance and Nominating Committee deems appropriate, a third-party search firm. These candidates are evaluated by the Corporate Governance and Nominating Committee by reviewing the candidates' biographical information and qualifications, and by checking the candidates' references. Qualified nominees are interviewed by at least one member of the Corporate Governance and Nominating Committee. Promising candidates meet with all members of the Board, and based on input from such interviews and the

information obtained by the Corporate Governance and Nominating Committee, the committee evaluates which of the prospective candidates are qualified to serve as directors and whether the committee should recommend to the Board that the Board nominate, or elect to fill a vacancy, these final prospective candidates. Candidates recommended by the Corporate Governance and Nominating Committee are presented to the Board for selection as nominees to be presented for election by the shareholders or to fill a vacancy.

The Corporate Governance and Nominating Committee evaluates shareholder-recommended candidates using the same process and the same criteria it uses to evaluate candidates from other sources.

Board Nominees for the Annual Meeting

Ms. Finney and Messrs. Burbach, Cole, Collis, Dimick, Grossman and Mulvena, who are all current members of the Board, are the directors standing for re-election at the Annual Meeting. Mr. LaViolette, who is not a current member of the Board, is standing for election at the Annual Meeting. Mr. LaViolette's nomination was recommended to our Corporate Governance and Nominating Committee by a non-employee director.

COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Shareholders may communicate directly with the Board by sending a certified or registered letter to any individual director, group of directors or Board committee c/o the Corporate Secretary of the Company, at the Company's main business address set forth above or by sending an email to any of the same individuals or groups at board@thoratec.com. The Corporate Secretary will review the correspondence and forward it to the individual director, group of directors or committee of the Board to whom the communication is directed, as applicable, if the communication is relevant to Thoratec's business and financial operations, policies or corporate philosophy. Communications that are threatening, illegal or similarly inappropriate, and advertisements, solicitations for periodical or other subscriptions, and other similar communications generally will not be forwarded to any director or group of directors.

PROPOSAL ONE**ELECTION OF DIRECTORS****Nominees**

A board of eight directors is to be elected at the Annual Meeting. Unless otherwise instructed, the proxy holders will vote the proxies received by them for the eight nominees named below, each of whom is presently serving as one of our directors, except for Paul LaViolette, who is standing for election at the Annual Meeting. If additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them in accordance with cumulative voting to elect as many of the nominees listed below as possible. In such event, the proxy holders will determine the specific nominees for whom such votes will be cumulated. The term of office for each person elected as a director will continue until the next annual meeting of shareholders or until the successor to such person has been elected and qualified. We do not expect that any nominee will be unable or will decline to serve as a director.

The following table provides information concerning our director nominees:

Name of Nominee	Age	Position with Our Company	Director Since
Neil F. Dimick	59	Director and Chairman of the Board	2003
Gerhard F. Burbach	47	Director, President and Chief Executive Officer	2006
J. Daniel Cole	62	Director	1997
Steven H. Collis	47	Director	2008
Elisha W. Finney	47	Director	2007
D. Keith Grossman	49	Director	1996
Paul A. LaViolette	51	Nominee	
Daniel M. Mulvena	60	Director	1997

There are no family relationships among any of our directors or executive officers.

Neil F. Dimick became a director of our Company in October 2003. In May 2007, Mr. Dimick became Chairman of the Board. Mr. Dimick was Executive Vice President and Chief Financial Officer of AmerisourceBergen Corporation, a pharmaceutical distributor, from August 2001 to May 2002, and served as Senior Executive Vice President and Chief Financial Officer and a director of Bergen Brunswig Corporation and was a member of that board's finance, investment and retirement committees for more than five years prior to its merger with AmeriSource Health in 2001. Mr. Dimick also spent eighteen years with the audit firm Deloitte & Touche LLP, where he was an audit partner and national director of the firm's real estate division. Mr. Dimick also serves as a member of the board of directors of Alliance Imaging, Inc., HLTH Corporation, Mylan Laboratories, Inc., Resources Global Professionals and WebMD Corporation.

Gerhard F. Burbach, President, Chief Executive Officer and Director, joined our Company as President and Chief Executive Officer in January 2006. He was elected to the Board at the same time. Mr. Burbach previously served as President and Chief Executive Officer of Digirad Corporation, a provider of solid-state imaging products and services to cardiologist offices, hospitals and imaging centers. Before that he served for two years as president and chief executive officer of Bacchus Vascular Inc, a developer of interventional cardiovascular devices. Previously, he served for three years as chief executive officer of Philips Nuclear Medicine, a division of Philips Medical Systems

specializing in nuclear medicine imaging systems. Until its acquisition by Philips Medical Systems, he spent four years at ADAC Laboratories, a provider of nuclear medicine imaging equipment and radiation therapy planning systems, where he became president and general manager of the nuclear medicine division. Mr. Burbach also spent six years with the consulting firm of McKinsey & Company, Inc., where he was most recently a senior engagement manager in the firm's healthcare practice. Mr. Burbach also serves as a member of the board of directors of Digirad.

J. Daniel Cole became a director of our Company in June 1997. Since March 1997, Mr. Cole has been a general partner of the Spray Venture Fund of Boston. Mr. Cole was President and Chief Operating Officer of SciMed Life Systems Corporation, an interventional cardiology products company, from March 1993 to March 1995, and Senior Vice President and Group President of the vascular business of Boston Scientific Corporation, a worldwide developer, manufacturer and marketer of medical devices that are used in a broad range of interventional medical specialties, from March 1995 to March 1997. He has also held a number of senior executive positions at Baxter Healthcare Corporation from April 1982 to January 1993, including President of its Edwards Less Invasive Surgery Division and its Critical Care Division. Mr. Cole also serves as a member of the board of directors of several private companies.

Steven H. Collis became a director of our Company in January 2008. Mr. Collis is Executive Vice President of AmerisourceBergen Corporation, and President of its AmerisourceBergen Specialty Group (ABSG). ABSG delivers specialty pharmaceuticals and related services to physician offices, including reimbursement consulting and physician education. Mr. Collis joined Bergen Brunswig Corporation, a predecessor to AmerisourceBergen, in 1994 as general manager of Alternate Site Distributors, and was named President of its Specialty Group in 1999. He was previously a principal and general manager of Sterling Medical, a national provider and distributor of medical disposable supplies, health management services and continuous quality management programs to the home care market.

Elisha W. Finney became a director of our Company in June 2007. Ms. Finney is Senior Vice President and Chief Financial Officer of Varian Medical Systems, a manufacturer of medical devices and software for treating cancer. Ms. Finney joined Varian Medical in 1988 as a risk manager and was named corporate treasurer in 1998. She was named Vice President, Finance and Chief Financial Officer in 1999, and promoted to Senior Vice President in 2005. Before that, she held risk management positions with the Fox Group and Beatrice Foods.

D. Keith Grossman became a director of our Company in February 1996. Since September 2007, Mr. Grossman has been a Managing Director with TPG (Texas Pacific Group), a private equity firm, in their healthcare venture capital arm. From January 1996 until January 2006, Mr. Grossman served as our President and Chief Executive Officer. Prior to joining us, Mr. Grossman was a Division President of Major Pharmaceuticals, Inc., from June 1992 to September 1995, at which time it was sold. From July 1988 to June 1992, Mr. Grossman served as the Vice President of Sales and Marketing for Calcitek, Inc., a manufacturer of implantable medical devices and a division of Sulzermedica (formerly Intermedics, Inc.). Prior to 1988, Mr. Grossman held various other sales and marketing management positions within the McGaw Laboratories Division of American Hospital Supply Corporation. Mr. Grossman also serves as a member of the board of directors of Intuitive Surgical, Inc., as well as a member of the board of directors of several private companies.

Paul A. LaViolette was Chief Operating Officer of Boston Scientific until July 2008. Mr. LaViolette joined Boston Scientific in January 1994. Prior to becoming its Chief Operating Officer, Mr. LaViolette held positions with Boston Scientific as Senior Vice President and Group President, Cardiovascular for Boston Scientific's Scimed, EPT and Target businesses, President of Scimed, President of Boston Scientific International, Senior Vice President and Group President-Nonvascular Businesses, and President, Boston Scientific International, and Vice President-International. Prior to joining Boston Scientific, he was employed by C.R. Bard, Inc. in various capacities, including President, U.S.C.I. Division, President, U.S.C.I. Angioplasty Division, Vice President and General Manager, U.S.C.I. Angioplasty Division, and Vice President U.S.C.I. Division.

Daniel M. Mulvena became a director of our Company in May 1997. Mr. Mulvena is the founder and owner of Commodore Associates, a consulting company. Mr. Mulvena was Group Vice President Cardiac/Cardiology and a member of the operating committee for Boston Scientific from February 1992 to May 1995. Prior to that, he was the President and Chief Executive Officer and Chairman of Lithox Systems, Inc., an early stage medical device company. Prior to that, Mr. Mulvena held a number of executive positions, including President of the Implants Division and President of the Cardiosurgery Division, at C.R. Bard, Inc. Mr. Mulvena also serves as a member of the board of

directors of Zoll Medical Corporation.

Required Vote; Recommendation of the Board

The election of directors at the Annual Meeting requires the affirmative vote of a plurality of the votes cast at the Annual Meeting. The eight nominees receiving the highest number of affirmative votes of the shares present or represented and entitled to vote shall be elected as directors. Votes withheld from any director are counted for purposes of determining the presence or absence of a quorum for the transaction of business, but have no further legal effect under California law. Unless marked to the contrary, proxies received will be voted **FOR** the eight nominees as the proxy holders determine in order to elect as many of the eight nominees as possible, whether or not by cumulative voting.

THE BOARD UNANIMOUSLY RECOMMENDS A VOTE FOR ELECTION TO THE BOARD OF EACH OF THE NOMINEES PROPOSED ABOVE.

**SECURITIES AUTHORIZED FOR ISSUANCE UNDER
EQUITY COMPENSATION PLANS**

The following table provides information as of January 3, 2009 regarding securities authorized for issuance under the Company's equity compensation plans. The equity compensation plans of the Company include the 1996 Nonemployee Directors Stock Option Plan, the 1997 Stock Option Plan, the 2006 Incentive Stock Plan (the 2006 Plan) and the 2002 Employee Stock Purchase Plan (the ESPP). Each of these equity compensation plans was approved by the Company's shareholders.

Plan Category	Number of Securities to be Issued Upon	Weighted-Average	Number of Securities Remaining Available for Future Issuance Under Equity
	Exercise of Outstanding Options, Warrants, and Rights	Exercise Price of Outstanding Options, Warrants, and Rights	Compensation Plans (Excluding Securities Reflected in the First Column)
Equity compensation plans approved by security holders	4,259,028	\$ 16.37	3,375,765(1)
Equity compensation plans not approved by security holders			
Total	4,259,028	\$ 16.37	3,375,765

(1) Includes 182,411 shares available for future issuance under the ESPP as of January 3, 2009.

PROPOSAL TWO

RATIFICATION OF INDEPENDENT AUDITORS

In accordance with its charter, the Audit Committee has selected Deloitte & Touche LLP (Deloitte & Touche), independent auditors, to audit the Company s consolidated financial statements for fiscal 2009. The Board is asking shareholders to ratify the appointment of Deloitte & Touche as the Company s independent auditors for the fiscal year ending January 2, 2010.

Deloitte & Touche has served as our independent auditors since our inception. In accordance with standing policy, Deloitte & Touche periodically changes the personnel who work on our audit. In addition to performing the audit of our consolidated financial statements, Deloitte & Touche provided various other audit-related services during fiscal years 2008 and 2007. Representatives of Deloitte & Touche are expected to be present at the Annual Meeting and will have the opportunity to make a statement if they wish to do so. Additionally, they will be available to respond to appropriate shareholder questions.

Shareholder ratification of the selection of Deloitte & Touche as the Company s independent auditors is not required by the Company s By-Laws or applicable law. However, the Audit Committee is submitting the selection of Deloitte & Touche to the shareholders for ratification as a matter of good corporate practice. In the event the shareholders fail to ratify the appointment, the Audit Committee may reconsider this appointment. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent accounting firm at any time during the year if the Audit Committee determines that such a change would be in the Company s and its shareholders best interests.

Required Vote; Recommendation of the Board

The affirmative vote of the holders of a majority of the shares represented and entitled to vote at the Annual Meeting will be required to ratify the selection of Deloitte & Touche as the Company s independent auditors for the fiscal year ending January 2, 2010. Abstentions will be treated as being present and entitled to vote on the proposal and, therefore, will have the effect of votes against the proposal. Unless marked to the contrary, proxies received will be voted **FOR** ratification of the selection of Deloitte & Touche.

THE BOARD AND THE AUDIT COMMITTEE UNANIMOUSLY RECOMMEND A VOTE FOR RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE AS THE COMPANY S INDEPENDENT AUDITORS.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS¹

The Audit Committee of the Board serves as the representative of the Board for general oversight of the Company's financial accounting and reporting process, system of internal control and audit process.

Management has primary responsibility for preparing the Company's financial statements and for the Company's financial reporting process. The Company's independent auditors, Deloitte & Touche LLP, are responsible for expressing an opinion on the conformity of our audited financial statements to accounting principles generally accepted in the United States of America.

The Audit Committee hereby reports as follows:

The Audit Committee has reviewed and discussed the audited financial statements with management.

The Audit Committee has discussed with the independent auditors the matters required to be discussed by Statement of Auditing Standards No. 114.

The Audit Committee has received the written disclosures and the letter from the independent auditors required by PCAOB Rule 3526 (Communications with Audit Committees Concerning Independence), and has discussed with the independent auditors their independence.

The Audit Committee has also considered whether the provision of other non-audit services by Deloitte & Touche LLP to the Company is compatible with the auditors' independence.

Based on the review and discussions with management and the independent auditors referred to above, the Audit Committee recommended to the Board that the Company's audited financial statements for the fiscal year ended January 3, 2009 be included in the Company's 2008 Annual Report on Form 10-K for filing with the Securities and Exchange Commission.

Each of the members of the Audit Committee is independent as defined under the listing standards of NASDAQ.

Submitted By:
The Audit Committee

Elisha W. Finney, Chairwoman
J. Daniel Cole
Neil F. Dimick

¹ The Audit Committee Report will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or under the Exchange Act, except to the extent that our Company specifically incorporates such report by reference, and such report will not otherwise be deemed to be soliciting material to be filed under such acts.

FEES PAID TO ACCOUNTANTS FOR SERVICES RENDERED DURING FISCAL YEARS 2008 AND 2007.

The fees billed to our Company for the fiscal years ended January 3, 2009 and December 29, 2007 by Deloitte & Touche, along with the member firms of Deloitte & Touche Tohmatsu and their respective affiliates, are presented below.

Audit and Non-Audit Fees

The following table presents fees for professional audit services rendered by Deloitte & Touche for the audit of the Company's annual financial statements for the years ended January 3, 2009 and December 29, 2007 and fees billed for other services rendered by Deloitte & Touche, the member firms of Deloitte & Touche Tohmatsu, and their respective affiliates during those periods. Amounts for fiscal 2007 include billings received during fiscal 2007 and fiscal 2008. Amounts for fiscal 2008 include billings received during fiscal 2008 and fiscal 2009 and estimates of unbilled time for work related to the fiscal 2008 audit.

	Fiscal Year 2008	Fiscal Year 2007
Audit Fees	\$ 2,044,676	\$ 1,835,760
Audit-Related Fees		
Tax Fees		
All Other Fees		
Total	\$ 2,044,676	\$ 1,835,760

Audit Fees primarily represent amounts paid for the audit of the Company's annual financial statements, reviews of SEC Forms 10-Q and 10-K, audit of the Company's internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002, and statutory audit requirements at non-U.S. locations.

Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services of Independent Auditor

It is the policy of the Audit Committee to approve in advance all audit and permissible non-audit services to be provided to the Company by its independent auditors. The Audit Committee may delegate the authority to pre-approve such services to a designated member or members of the Audit Committee, so long as any such delegated approvals are disclosed to the full Audit Committee at its next scheduled meeting. The Audit Committee approved all audit, audit-related, tax and other services provided by Deloitte & Touche for fiscal years 2008 and 2007 and the estimated costs of those services. Actual amounts billed, to the extent in excess of the estimated amounts, were periodically reviewed and approved by the Audit Committee. The Audit Committee reviews any non-audit procedures on an ongoing basis to ensure that the rendering of any such services is compatible with maintaining Deloitte & Touche's independence.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our Common Stock as of April 6, 2009 by:

Each of our directors and nominee for director;

Each Named Executive Officer, as defined in the Executive Compensation section below;

All directors and executive officers as a group; and

Each person who is known by us to own beneficially more than 5% of our Common Stock.

Name and Address(1)	Number of Shares Beneficially Owned(2)	Percent of Shares Beneficially Owned(2)
FMR LLC(3) 82 Devonshire Street Boston, MA 02109	6,357,405	10.14%
Barclays Global Investors, NA(3) 400 Howard Street San Francisco, CA 94105	3,447,981	5.76%
J. Donald Hill(4)	933,333	1.63%
Gerhard F. Burbach(5)	433,329	*
Lawrence Cohen(6)	238,127	*
David A. Lehman(7)	121,231	*
David V. Smith(8)	99,612	*
J. Daniel Cole(9)	63,750	*
D. Keith Grossman(10)	54,508	*
Neil F. Dimick(11)	35,832	*
Daniel M. Mulvena	13,750	*
Elisha W. Finney(12)	12,250	*
Steven H. Collis	12,000	*
Howard E. Chase	11,250	*
Paul A. LaViolette	0	
Directors and Executive Officers as a Group (12 persons)(13)	2,028,972	3.48%

* Less than 1%

(1) Unless otherwise indicated, the address of the persons set forth above is the address of our principal executive offices appearing elsewhere in this Proxy Statement.

(2) Applicable percentage ownership for each shareholder is based on 56,367,072 shares of Common Stock outstanding as of April 6, 2009, together with applicable options for such shareholder. Beneficial ownership is determined in accordance with the rules of the SEC, and includes voting and investment power with respect to

the shares. Beneficial ownership also includes shares of Common Stock subject to options and warrants exercisable or convertible within 60 days of April 6, 2009. Shares of Common Stock subject to outstanding options are deemed outstanding for computing the percentage of ownership of the person holding such options, but are not deemed outstanding for computing the percentage ownership of any other person. Except pursuant to applicable community property laws or as indicated in the footnotes to this table, to our knowledge, each shareholder identified in the table possesses sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by such shareholder and such shares have not been pledged as security by the shareholder.

- (3) The number of shares beneficially owned is based on the named shareholder's most recent filings with the SEC on Schedule 13G as of December 31, 2008 for each of FMR LLC and Barclays Global Investors, NA.

- (4) Includes 910,208 shares of Common Stock held by J. Donald Hill Separate Property Living Trust U/A/D 7/23/04 (the J. Donald Hill Trust), a separate property trust. Dr. Hill is trustee of the J. Donald Hill Trust. Includes 13,125 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (5) Includes 325,000 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (6) Includes 211,151 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (7) Includes 100,682 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (8) Includes 56,251 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (9) Includes 13,125 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (10) Includes 44,508 shares of Common Stock held by the D. Keith Grossman & Hallie Hildebrand Grossman, TTEES Grossman Family Trust. Mr. Grossman is a trustee of the trust, with shared voting and investment power of the shares held in the trust.
- (11) Includes 13,125 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.
- (12) Includes 1,000 shares of Common Stock held by the Robert D. Finney and Elisha W. Finney 2000 Revocable Trust. Ms. Finney is a trustee of the trust, with shared voting and investment power of the shares held in the trust.
- (13) Includes 732,459 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 6, 2009.

COMPENSATION DISCUSSION AND ANALYSIS

OVERALL OBJECTIVES OF EXECUTIVE COMPENSATION PROGRAM

Our compensation program for our Named Executive Officers is designed to attract, motivate and retain qualified executives with substantive experience in the development, invention, regulatory approval, manufacture, marketing and sale of medical devices. Our Named Executive Officer compensation program is based on the following underlying principles:

The Named Executive Officer compensation program and payouts should be aligned with our strategic business goals consistent without our corporate values;

Named Executive Officers' total direct compensation (consisting of salary, annual incentive compensation, and long-term equity incentive opportunities) should be competitive;

A substantial portion of Named Executive Officers' compensation should be at risk and should vary based on both overall company performance and individual performance; and

The Named Executive Officer compensation program should align the interests of our Named Executive Officers with those of our shareholders.

The Compensation and Option Committee assesses our Named Executive Officer compensation program annually to monitor our adherence to these principles.

DETERMINING EXECUTIVE COMPENSATION

The Compensation and Option Committee, with the assistance of its independent compensation consultant and input from management and the members of the Board, determines compensation levels for our Named Executive Officers by compiling external benchmarks and assessing the competitiveness of our compensation levels relative to those benchmarks while taking into account each Named Executive Officer's level of responsibility, individual performance, level of experience, and tenure with the Company.

Compensation Consultant

Consistent with prior years, in 2008, Radford, an independent compensation consultant, was retained by the Compensation and Option Committee. The Compensation and Option Committee requested Radford to prepare competitive benchmarking studies as to, and advise the Compensation and Option Committee on, both executive and director compensation, including base salary or fees, cash incentive compensation, and long-term equity incentive compensation for 2008. Radford was engaged by, reported to, and was accountable to the Compensation and Option Committee, and Radford was not allowed to conduct any other work for Thoratec without the authorization of the Compensation and Option Committee. Radford did not provide any services to Thoratec in 2008 beyond its engagement as an advisor to the Compensation and Option Committee. Radford is an independent consultant specializing in compensation matters in the technology industry.

Competitive Benchmarking

Each year the Compensation and Option Committee, with the assistance of its compensation consultant, benchmarks the competitiveness of the Named Executive Officers' total direct compensation (consisting of base salary, annual cash

incentive compensation and long-term equity incentive compensation). In addition, the Compensation and Option Committee also reviews the prevalence of other elements of compensation, such as change in control and severance benefits and executive-level benefit plans, as part of this annual study.

The goal of the Compensation and Option Committee's benchmarking is to assess the competitiveness of the Named Executive Officers' total direct compensation as compared to executives with comparable experience in similar positions and job-related responsibilities at companies in the medical technology industry of comparable size and, to the extent possible, geographic location. The Compensation and Option Committee and its compensation consultant, with input from management, have developed a primary peer group of corporations, the compensation programs of which are reviewed for this annual benchmarking study.

The primary peer group consists of medical device companies of generally comparable size, based upon market capitalization and annual revenue. We have chosen not to limit the primary peer group to our immediate geographic peers as we compete for experienced executives in various other geographic regions where biotechnology/biomedical/pharmaceutical companies are located (including the San Francisco Bay Area, central New Jersey, Minneapolis and the greater Boston area). This primary peer group is used to formally benchmark each element of total direct compensation (described in more detail below).

In addition to the primary peer group, the Compensation and Option Committee also reviews the compensation practices of medical device companies that are much larger than Thoratec based on number of employees, market capitalization and revenue. Although the Compensation and Option Committee does not use information regarding these larger companies to formally benchmark the compensation levels provided to our Named Executive Officers (due to differences in the scope of job responsibilities for executives holding similar titles), the Compensation and Option Committee reviews the compensation practices and programs of these market leaders for purposes of determining and confirming best practices in our industry.

In developing the primary peer group and comparison information, the Compensation and Option Committee and its compensation consultant generally relied on compensation information reported in the peer group companies' public filings.

The following companies comprised the primary peer group for 2008 decision making:

Abiomed Inc.	ev3 Inc.	NuVasive, Inc.
Align Technology, Inc.	Haemonetics Corporation	SonoSite, Inc.
American Medical Systems	Integra LifeSciences Holdings Corporation	Ventana Medical Systems, Inc.
Arthrocare Corporation	Corporation	Volcano Corporation
Cyberonics, Inc.	Intuitive Surgical, Inc.	Wright Medical Group, Inc.
Edwards LifeSciences Corporation	Inverness Medical Innovations, Inc.	
	Mentor Corporation	

The Compensation and Option Committee targets base salaries for our Named Executive Officers at between the 50th and 75th percentile, total cash compensation (comprised of base salary and annual incentive compensation) at the 75th percentile, and total direct compensation (comprised of base salary, annual incentive compensation and equity compensation) at the 75th percentile, in each case, as compared to the primary peer group. The Compensation and Option Committee has determined that providing compensation at these levels allows us to control base salaries while providing sufficient incentives to attract and retain highly qualified executives, remaining geographically competitive (taking into account the relatively high cost of our market as compared to other areas of the country) and adhering to the principles outlined above. The actual targeted total direct compensation for each Named Executive Officer may be above or below the 75th percentile, reflecting the Named Executive Officer's overall individual contribution, scope of responsibilities, level of experience, and tenure with the organization.

Compensation Determinations

In addition to the competitive benchmarking study, in making compensation decisions the Compensation and Option Committee also takes into account recommendations from our chief executive officer and our vice president of human resources, as well as information from other members of the Board.

For each Named Executive Officer other than the chief executive officer, the chief executive officer makes recommendations for annual adjustments to compensation levels and short-term and long-term incentive

compensation components to the Compensation and Option Committee based upon his assessment of each Named Executive Officer's performance, retention risks, potential within the organization and the results of the benchmarking study described above. The Compensation and Option Committee reviews with the chief executive officer these assessments and recommendations and determines whether or not to approve and/or modify the recommendations. The chief executive officer's performance with respect to these individual factors is evaluated by the Compensation and Option Committee with input from the Board. The Compensation and Option Committee makes recommendations to the Board regarding annual adjustments to the chief executive officer's compensation levels and short-term and long-term incentive compensation components based on these assessments. The Board then determines the compensation for the chief executive officer based on these recommendations.

ELEMENTS OF EXECUTIVE COMPENSATION

The Named Executive Officer compensation program is comprised of the following elements, although not all the Named Executive Officers receive each element listed under other compensation and benefits :

Total direct compensation, consisting of:

Base salary;

Annual cash incentive compensation; and

Long-term equity incentive compensation (including stock options and shares of restricted stock).

Other compensation and benefits, consisting of:

Participation in welfare benefit plans; and

Participation in tax-qualified and nonqualified deferred compensation plans.

Severance and change in control benefits.

Base Salaries

We offer all of our Named Executive Officers an annual base salary to compensate them for services rendered during the year. Base salaries are essential for the attraction and retention of talented executives and are determined consistent with the methodology outlined above. Salaries are reviewed annually by the Compensation and Option Committee, but do not automatically increase.

For 2008, the Compensation and Option Committee targeted base salaries for the Named Executive Officers between the 50th and the 75th percentiles of the primary peer group. The following summarizes adjustments (if any) made to base salaries for the Named Executive Officers during 2008 to achieve this target:

Gerhard F. Burbach, President and Chief Executive Officer, received a 6.25% increase in base pay increasing his base pay from \$400,000 to \$425,000 annually. This increase was based on his individual performance and his position relative to market levels as provided by our peer group analysis. Following the increase, Mr. Burbach's base salary was slightly below the 50th percentile for our peer group companies.

David V. Smith, Executive Vice President & Chief Financial Officer, received a 3.5% increase in base pay increasing his base pay from \$340,000 to \$351,900 annually. This increase was based on his individual performance and his position relative to market levels as provided by our peer group analysis. Following the increase, Mr. Smith's base salary was slightly above the 75th percentile for our peer group companies.

Lawrence Cohen, President of International Technidyne Corporation, received a 5.0% increase in base pay increasing his base pay from \$300,000 to \$315,000 annually. This increase was based on his individual performance, his scope of responsibilities and his position relative to market levels as provided by our peer group analysis. Following the increase, Mr. Cohen's base salary was slightly below the 50th percentile for our peer group companies.

David A. Lehman, Senior Vice President and General Counsel, received a 6.2% increase in base pay increasing his base pay from \$245,000 to \$260,190 annually. This increase was based on his individual performance, scope of responsibilities, position relative to market levels as provided by our peer group analysis. Following the increase, Mr. Lehman's base salary was slightly above the 75th percentile for our peer group companies.

Annual Cash Incentive Compensation

We provide all Named Executive Officers the opportunity to earn variable cash compensation under either our Corporate Executive Incentive Plan or, with respect to our division/subsidiary presidents, the Executive Incentive Plan for their operating unit. The purpose of these plans is to reward the Named Executive Officers for performance during a single fiscal year and to provide appropriate incentives for them to achieve those goals that are most important to the near and long-term success of the Company, as measured against specific performance criteria

relative to financial results and individual performance. Target incentive bonus opportunities, expressed as a percentage of base salary, for the Named Executive Officers for 2008 were as follows (in each case these levels were determined consistent with the methodology outlined above):

Named Executive Officer	2008 Target Bonus Percentage
Gerhard F. Burbach	100%
David V. Smith	75%
Lawrence Cohen	70%
David A. Lehman	60%

The actual annual bonus paid to each Named Executive Officer is determined based upon the Named Executive Officer's target bonus multiplied by the Named Executive Officer's relative achievement with respect to his or her individual performance goals and the Company's (or with respect to the division/subsidiary presidents, the operating unit's) achievement of two, equally-weighted financial goals (each described in more detail below).

Individual Performance Goals

At the beginning of each year, the Compensation and Option Committee, with input from our chief executive officer and vice president of human resources, establishes individual performance goals for each Named Executive Officer, other than the chief executive officer. Individual performance goals for the chief executive officer are developed by the Compensation and Option Committee and reviewed and approved by the Board. These qualitative and quantitative performance goals vary by Named Executive Officer and focus upon strategic, operational and project-oriented objectives for the functional area over which the Named Executive Officer has responsibility. The Compensation and Option Committee designs these objectives to drive long-term growth and strategic positioning, although these objectives do not necessarily translate into current year financial results. At year end, the Compensation and Option Committee evaluates the performance of each Named Executive Officer relative to these qualitative and quantitative goals based upon the chief executive officer's recommendations, except for the evaluation of the chief executive officer, which the Compensation and Option Committee and the Board determines directly. For 2008, the individual performance goals represented 50% of the target bonus percentage for each of Messrs. Burbach, Smith, Cohen, and Lehman.

Financial Goals

As noted above, the annual bonus paid to each Named Executive Officer is based in part upon the achievement of two equally-weighted financial goals. The performance measures used for these financial goals are reviewed annually by the Compensation and Option Committee, in consultation with management, to assure that they align with what the Compensation and Option Committee and management believe are the most important drivers of both annual financial performance and long-term shareholder value. Under the Corporate Executive Incentive Plan (applicable to Messrs. Burbach, Smith and Lehman), the financial targets for 2008 were based upon the Company's overall revenue and non-GAAP income before tax. For Mr. Cohen, the financial targets for 2008 were based upon revenue and non-GAAP income before tax for our subsidiary, International Technidyne Corporation. The Compensation and Option Committee chose revenue and non-GAAP income before tax as the performance metrics under the Company's annual bonus plan, with equal weighting, as it believes that non-GAAP income before tax is an important indicator of the Company's current profitability and a priority to the Company's shareholders, but that as a growth Company, revenue is an important indicator of the Company's potential for increasing long-term shareholder value. Under each plan, non-GAAP income before tax means GAAP net income before taxes (for the Company, the cardiovascular

division or International Technidyne Corporation, as applicable) excluding, as applicable, amortization of intangibles, in-process research & development, impairment of intangibles, certain litigation, restructuring and CEO transition expenses and certain other non-recurring costs, and also excluding share-based compensation expense under SFAS No. 123R, changes in the value of the make-whole provision of our convertible notes and special incentive awards.

The achievement of each of these goals for purposes of calculating the annual bonus for our Named Executive Officers is determined independently based on a formula that compares actual achievement to the performance target for the year. Achievement of the financial goals at the threshold level (which, for 2008, was 95% of the target level for the revenue goal and 90% of the target level for the non-GAAP income before tax goal) would result in a payout percentage of 50%, and achievement at the target level would result in a payout percentage of 100% (with the payout percentage for achievement between the threshold and target determined by interpolation). Achievement of the financial goals below the threshold level would result in no payout for that goal. For each percentage of performance above the target level for the non-GAAP income before tax goal, the payout percentage would be increased by 3%. The Compensation and Option Committee believes that incorporating this type of leverage and payment acceleration in the annual bonus formula encourages superior performance and fosters greater initiative, resourcefulness, teamwork and efficiency among our Named Executive Officers and other members of senior management. The following table sets forth the 2008 financial goals set by the Compensation and Option Committee and the achievement of those goals:

	Threshold Level	Target Level	Actual Achievement Percentage
Corporate Executive Incentive Plan			
2008 Revenue	\$ 255,022,000	\$ 268,444,000	100%
2008 Non-GAAP Income Before Tax	\$ 37,735,000	\$ 41,928,000	165.92%
ITC Executive Incentive Plan			
2008 ITC Revenue	\$ 93,244,000	\$ 98,152,000	100.0%
2008 ITC Non-GAAP Income Before Tax	\$ 12,755,000	\$ 14,172,000	0%

We do not currently have a policy requiring a fixed course of action with respect to compensation adjustments following later restatements of performance targets. Under those circumstances, the Compensation and Option Committee would evaluate whether compensation adjustments were appropriate based upon the facts and circumstances surrounding the restatement.

Long-Term Equity Incentive Compensation

Consistent with the principles outlined above, long-term incentives are designed to provide the Named Executive Officers with an equity stake in the Company so as to align the Named Executive Officers' interests with those of our shareholders and create significant incentives for executive retention. The Compensation and Option Committee intends that long-term equity incentive compensation awards, when taken together with the base salary and annual incentive compensation opportunities provided to the Named Executive Officers, would result in total direct compensation to the Named Executive Officers at the 75th percentile, assuming performance at the target level under the annual incentive compensation plan, as compared to executives in similar positions at companies in the primary peer group. In 2008, we made equity grants in the form of stock options and restricted stock to the Named Executive Officers. Stock options provide an opportunity for the Company to reward its Named Executive Officers if our share price increases and the Named Executive Officers remain employed by us during the period required for the options to vest. Awards of restricted stock align the interests of Named Executive Officers with the interests of shareholders through stock ownership, increase the reward to the Named Executive Officers when our stock price increases, and serve as a retention tool for the Named Executive Officers.

When allocating long-term incentive compensation opportunities, the Compensation and Option Committee first establishes a target dollar amount for the equity-based compensation awards to be made to each Named Executive

Officer (determined as described above). The Compensation and Option Committee then allocated the target dollar amount between stock options and restricted stock to achieve target amounts for each Named Executive Officer. In allocating between stock options and restricted stock, the Compensation and Option Committee uses a valuation formula that provides that each share of restricted stock has a value equal to three stock options. The Compensation and Option Committee believes that a mix of stock options and restricted stock creates an effective tool for incentivizing and retaining those executives who are most responsible for influencing shareholder value by balancing variable compensation (stock options) and compensation with a built-in value at the time of grant (restricted stock). The Compensation and Option Committee then determines the number of shares

subject to stock options to be granted to the Named Executive Officers based upon the value allocated to stock options using a Black-Scholes option pricing model.

Both the stock options and restricted stock granted in 2008 to our Named Executive Officers vest over time as described in more detail in the discussion following the Grants of Plan-Based Awards in Fiscal Year 2008 table below.

Grant Timing Policy

The Compensation and Option Committee and senior management monitor our stock option and restricted stock grant policies to ensure that they comply with governing regulations and are consistent with good corporate practice. In each of 2008 and 2009, grants to Named Executive Officer were made at Compensation and Option Committee meetings held at the same time as the first quarter meetings of the Board of Directors (which meeting dates were set several months in advance), after results for the preceding fiscal year became available, enabling the Compensation and Option Committee to consider both the prior year's performance and expectations for the succeeding year in making grant decisions. However, the Compensation and Option Committee has the right to make grants at other times of the year when appropriate. Scheduling decisions are made without regard to anticipated earnings or other major announcements by the Company.

Deferred Compensation Plan

The Named Executive Officers may elect to defer compensation payable to them under our Deferred Compensation Plan. This plan is designed to allow for retirement savings above the limits imposed by the IRS for 401(k) plans on an income tax-deferred basis for members of senior management who choose to participate. Amounts deferred into the plan are held in accounts with values indexed to the performance of selected mutual funds or money market accounts. We do not match executive deferrals under the deferred compensation plan. We maintain this plan for the purpose of providing a competitive benefit and allowing Named Executive Officers an opportunity to defer income tax payments on their cash compensation.

Other Employee Benefit Plans

The Named Executive Officers are eligible for the same benefits available to our employees generally. These include participation in a tax-qualified 401(k) plan, the ESPP, and group life, health, dental, vision, and disability insurance plans. Additionally, we pay the premiums on disability insurance for employees at the level of senior director or higher.

Perquisites

We do not provide our Named Executive Officers with significant perquisites and personal benefits.

Severance Benefits

We have entered into agreements with our Named Executive Officers that provide for benefits upon termination of employment under certain circumstances, including in connection with a change in control of the Company. We provide these benefits as a means of remaining competitive, retaining executives, focusing executives on shareholder interests when considering strategic alternatives, and providing income protection in the event of involuntary loss of employment. Please refer to the discussion under Potential Payments upon Termination or Change in Control below for a more detailed discussion of these arrangements. Consistent with our long-standing severance policy for executive officers, these arrangements provide for standard severance benefits upon a termination of the Named

Executive Officer's employment with the Company without cause, not in connection with a change in control, of one times base salary (two times for Mr. Burbach), plus an additional payment for COBRA continuation coverage up to twelve months. In the event of a change in control of the Company, and if the Named Executive Officer is terminated without cause or resigns for good reason, the Named Executive Officer will receive enhanced severance benefits of two times base salary plus bonus (2.5 times for Mr. Burbach). Certain Named Executive Officers are also entitled to accelerated vesting of stock option awards in connection with a termination of employment without cause, to the extent such equity awards were granted prior to April 2007. Our Named

Executive Officers are entitled to vesting acceleration of unvested stock options and restricted stock upon the occurrence of a change in control (i) immediately, to the extent such equity awards were granted prior to April 2007, and (ii) after a termination of their employment without cause or their resignation for good reason within 18 months of a change of control, for unvested equity awards granted subsequent to April 2007. The unvested portion of Mr. Burbach's initial grant of restricted stock vests 50% upon a change of control and the remaining 50% upon the earlier of the one year anniversary of the effective date of such change of control or the termination of his employment without cause or his resignation for good reason. Mr. Burbach's severance benefits were negotiated with Mr. Burbach prior to his beginning employment with the Company.

The Compensation and Option Committee has engaged its compensation consultant to provide information on typical industry practices (based on a review of the primary peer group and the secondary peer group) concerning employment, severance, and change in control agreements. Based on this review, the Compensation and Option Committee believes the Company's current arrangements with its Named Executive Officers are consistent with competitive practices. The Compensation and Option Committee intends to continue to review these arrangements periodically.

STOCK OWNERSHIP GUIDELINES

We do not have stock ownership guidelines for our Named Executive Officers as we do not believe that it is customary for companies of our size in our industry to have such guidelines.

TAX CONSIDERATIONS

Section 162(m) of the Internal Revenue Code of 1986

Section 162(m) of the Code generally limits deductions for compensation in excess of \$1,000,000 paid for any fiscal year to the Company's covered employees, which is defined as the chief executive officer and the three other most highly compensated executive officers, other than the chief financial officer. Certain types of compensation are deductible if certain requirements are met. We attempt to structure our compensation arrangements to achieve deductibility under Section 162(m), unless the benefit of such deductibility is outweighed by the need for flexibility or the attainment of other corporate objectives. The Compensation and Option Committee will continue to monitor issues concerning the deductibility of executive compensation and may take appropriate action if and when it is warranted. Since corporate objectives may not always be consistent with the requirements for full deductibility, the Compensation and Option Committee is prepared, if it deems appropriate, to enter into compensation arrangements under which payments may not be deductible under Section 162(m). Thus, deductibility will not be the sole factor used by the Compensation and Option Committee in ascertaining appropriate levels or modes of compensation.

In 2008, all stock option grants were intended to qualify as performance-based compensation under Section 162(m) and thus are intended to be fully deductible.

Section 280G of the Internal Revenue Code of 1986

Section 280G of the Code disallows a company's tax deduction for what are defined as excess parachute payments and Section 4999 of the Code imposes a 20% excise tax on any person who receives excess parachute payments. Our Named Executive Officers, as part of their severance arrangements, will be provided with tax gross-up payments in the event their payments become subject to this excise tax. The Compensation and Option Committee believes that tax gross-up protection is appropriate and necessary for executive retention and consistent with the current practices of our industry competitors. We take into account the potential for tax gross-up payments in structuring our compensation programs, but such considerations are not determinative.

**REPORT OF THE COMPENSATION AND OPTION COMMITTEE
OF THE BOARD OF DIRECTORS²**

In accordance with its written charter adopted by the Board, the Compensation and Option Committee has oversight of the Company's overall compensation structure, policies and programs. In discharging its oversight responsibility, the Committee has retained an independent compensation consultant to advise the Committee regarding market and general compensation trends.

The Compensation and Option Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management.

Based on the review and discussions with management referred to above, the Compensation and Option Committee recommended to the Board that the Compensation Discussion and Analysis be included in the 2009 Proxy Statement on Schedule 14A for filing with the Securities and Exchange Commission.

Submitted By:
The Compensation and Option Committee

Daniel M. Mulvena, Chairman
Steven H. Collis
J. Donald Hill, M.D.

² The Compensation and Option Committee Report will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or under the Exchange Act, except to the extent that our Company specifically incorporates such report by reference, and such report will not otherwise be deemed to be soliciting material to be filed under such Acts.

EXECUTIVE COMPENSATION

The following table shows, for fiscal years 2008, 2007 and 2006, compensation awarded or paid to, or earned by, Thoratec's CEO, CFO, and two most highly compensated executive officers other than the CEO and CFO (collectively referred to herein as the "Named Executive Officers") at January 3, 2009.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary (\$)(1)	Bonus (\$)(2)	Stock Awards (\$)(3)	Option Awards (\$)(3)	Non-Equity	All	Total (\$)
						Incentive Plan Compensation (\$)(1)	Other Compensation (\$)(4)	
Richard F. Burbach	2008	433,173		493,695	976,410	1,202,206	15,772	3,121,25
President and	2007	400,000		348,477	1,281,507	195,760	14,731	2,240,47
Chief Executive Officer(5)	2006	344,712		153,452	1,785,043	149,733	8,392	2,441,33
David V. Smith	2008	358,667	60,000	233,098	298,639	740,702	12,363	1,703,46
Executive Vice President	2007	340,000	60,000	176,489	370,206	161,126	9,613	1,117,43
and Chief Financial	2006	1,308			687			1,99
Officer(6)								
Lawrence Cohen	2008	321,058		123,369	144,694	124,583	11,730	725,43
President, International	2007	300,000		81,405	149,062	134,400	10,390	675,25
Technidyne Corporation	2006	290,000	362,500	35,885	200,983	98,577	11,506	999,45
David A. Lehman	2008	265,194		102,418	138,198	450,356	10,701	966,86
Senior Vice President and	2007	245,000		60,384	136,953	98,760	9,281	550,37
General Counsel	2006	235,000	117,500	25,123	156,984	73,438	8,922	616,96

- (1) Includes amounts deferred pursuant to Section 401(k) of the Code and Deferred Compensation Plan. Our fiscal year ends on the Saturday closest to December 31 of each year and, accordingly, will periodically contain more or less than 365 days. Fiscal year 2008 ended January 3, 2009 and contained 53 weeks. As such, the salary earned by each Named Executive Officer in fiscal year 2008 includes one week of salary more than the 2008 annual base salary described elsewhere in this Proxy Statement.
- (2) The payments for Messrs. Cohen and Lehman listed in the "Bonus" column above reflect retention bonuses earned in 2006. The payments for Mr. Smith listed in the "Bonus" column above reflects a sign-on bonus of \$240,000 that is paid out in four equal installments.
- (3) Stock awards consists of restricted stock. Amounts shown do not reflect compensation actually received by the Named Executive Officer. Instead, the amounts shown are the dollar amounts recognized by us as compensation expense for financial reporting purposes in 2008 for stock and option awards pursuant to FAS 123R, excluding estimates of forfeitures related to service-based vesting conditions. The assumptions made in the valuation of such awards are set forth under Note 11 of the Notes to Consolidated Financial Statements in Thoratec's Annual Report on Form 10-K for the year ended January 3, 2009.
- (4)

The payments listed in the All Other Compensation column above reflect the value of 401(k) matching contributions, company payments for supplemental life insurance premiums and company payments for disability insurance premiums for each of the Named Executive Officers. All of the payments reflected in the All Other Compensation column are based upon the actual cost expended by Thoratec in connection with such amounts.

- (5) Mr. Burbach was appointed President and Chief Executive Officer of Thoratec on January 17, 2006.
- (6) Mr. Smith was appointed Executive Vice President and Chief Financial Officer of Thoratec on December 29, 2006.

Employment Agreements

Gerhard F. Burbach. Gerhard F. Burbach and the Company entered into an amended and restated employment agreement dated April 23, 2007. In accordance with the terms of the employment agreement, Mr. Burbach has entered into an at-will employment relationship with the Company providing for annual base salary of \$400,000, subject to annual increase at the sole discretion of the Board, and a target bonus under our Corporate Executive Incentive Plan equal to 80% of his base salary (Mr. Burbach's target bonus under our Corporate Executive Incentive Plan was increased to 100% of his base salary by the Board in 2008). In connection with his commencement of

employment with Thoratec and in accordance with the terms his employment agreement, Mr. Burbach was initially granted a stock option to purchase 375,000 shares of Common Stock, vesting annually over a four year period, and 50,000 shares of restricted stock, vesting annually over a five year period. Mr. Burbach's employment agreement also provides for certain separation benefits as described more fully in the Potential Payments Upon Termination or Change of Control section of this Proxy Statement.

David V. Smith. Mr. Smith and the Company entered into an offer letter agreement dated November 22, 2006, pursuant to which Mr. Smith joined the Company effective December 29, 2006. In accordance with the terms of the offer letter agreement, Mr. Smith entered into an at-will employment relationship with the Company providing for annual base salary of \$340,000. Pursuant to the employment agreement, Mr. Smith's target bonus for 2007 and 2008 under our Corporate Executive Incentive Plan will be equal to 75% of his base salary. Pursuant to the terms of the offer letter, Mr. Smith was granted a sign on bonus of \$240,000.00, to be paid out in four equal installments, the first made within 30 days of Mr. Smith's date of hire, followed by payments on the first, second and third anniversaries of the initial payment. Pursuant to the terms of the offer letter agreement, Mr. Smith received stock options to purchase 100,000 shares of Common Stock, two-thirds of which were granted on the date Mr. Smith commenced employment with the Company and one-third of which were granted in conjunction with the Company's annual equity grant cycle in early 2007. Mr. Smith also received awards of restricted stock covering 40,000 shares of Common Stock, which awards were granted in conjunction with the Company's annual equity grant cycle in early 2007. These options and shares of restricted stock vest ratably over four years from their date of grant.

Lawrence Cohen. The Company entered into an amended and restated employment agreement dated April 23, 2007 with Lawrence Cohen. In accordance with the terms of the amended employment agreement, Mr. Cohen has entered into an at-will employment relationship with the Company providing for annual base salary of \$300,000 and a target bonus under the Company's incentive compensation plan for executive officers equal to 70% of his base salary. Mr. Cohen's amended employment agreement also provides for certain separation benefits as described more fully in the Potential Payments Upon Termination or Change of Control section of this Proxy Statement.

David Lehman. Mr. Lehman does not have a separate employment agreement with the Company.

Salary and Bonus in Proportion to Total Compensation. The following table sets forth the percentage of total compensation earned by each Named Executive Officer in 2008 represented by salary and annual incentive compensation:

Percentage of Total Compensation

	Salary	Annual Cash Incentive Compensation
Gerhard F. Burbach	13.88%	38.52%
David V. Smith	21.82%	45.07%
Lawrence Cohen	44.26%	17.17%
David A. Lehman	27.43%	46.58%

GRANTS OF PLAN-BASED AWARDS IN FISCAL YEAR 2008

Name	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards (\$)
	Grant Threshold Date	Target (\$)	Maximum (\$)				
Gerhard F. Burbach	2/27/08					14.97	491,730
	2/27/08			40,000	75,000		598,800
	N/A	425,000					
David V. Smith	2/27/08				25,000	14.97	163,910
	2/27/08			13,000			194,610
	N/A	263,925					
Lawrence Cohen	2/27/08				21,000	14.97	137,684
	2/27/08			11,000			164,670
	N/A	220,500					
David A. Lehman	2/27/08				21,000	14.97	137,684
	2/27/08			11,000			164,670
	5/15/08			100			1,620
	N/A	156,114					

The actual payouts under the non-equity incentive plan awards granted to the Named Executive Officers are made under the Corporate Executive Incentive Plan (for Messrs. Burbach, Lehman and Smith) and the International Technidyne Corporation Executive Incentive Plan (for Mr. Cohen) and are determined as described above under Compensation Discussion and Analysis Elements of Executive Compensation Annual Cash Incentive Compensation.

The stock awards granted to the Named Executive Officers were granted under the 2006 Equity Incentive Plan and provided for time-based vesting after 4 years, with the exception of the 5 year service grant of 100 shares to Mr. Lehman which were fully vested upon grant. The stock options granted to the Named Executive Officers were granted under the 2006 Equity Incentive Plan and vest over 4 years, with 1/4th of the shares subject to such option vesting on each anniversary of the date of grant. The exercise price of options granted under the 2006 Equity Incentive Plan is equal to the closing price of the Company's Common Stock on the date of grant.

OUTSTANDING EQUITY AWARDS AT 2008 FISCAL YEAR END

Name	Option Awards				Stock Awards		
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable(1)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)(2)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	
	Gerhard F. Burbach	187,500	187,500	23.62	1/17/2016		
		12,500	37,500	17.91	2/13/2017		
	0	75,000	14.97	2/27/2018			
					30,000(3)	960,600	
					33,333	1,067,323	
					40,000	1,280,800	
David V. Smith	33,334	33,333	17.58	12/29/2016			
	8,334	24,999	17.91	2/13/2017			
	0	25,000	14.97	2/27/2018			
					9,999	320,168	
					13,333(4)	426,923	
					13,000	416,260	
Lawrence Cohen	68,651	0	15.75	2/11/2012			
	24,000	0	13.97	6/5/2013			
	84,000	0	12.45	4/14/2014			
	12,500	12,500	20.34	2/24/2016			
	500	0	16.03	5/15/2016			
	5,000	15,000	17.91	2/13/2017			
	0	21,000	14.97	2/27/2018			
					4,167(5)	133,427	
					7,500	240,150	
					11,000	352,220	
David A. Lehman	13,042	0	11.97	4/21/2013			
	59,065	0	12.45	4/14/2014			
	8,750	8,750	20.34	2/24/2016			
	5,100	15,300	17.91	2/13/2017			
	0	21,000	14.97	2/27/2018			
					2,917(6)	93,402	
					5,900	188,918	
					11,000	352,220	

- (1) Unless otherwise indicated, options granted to the Named Executive Officers were granted on the date 10 years prior to the expiration date and vest at a rate of 1/4th per year on each anniversary of the date of grant.
- (2) Unless otherwise indicated, restricted stock granted to the Named Executive Officers vest at a rate of 1/4th per year on each anniversary of the date of grant.
- (3) Restricted stock award was granted on May 12, 2006 and vests at the rate of 1/5th per year on each of February 24, 2007, January 17, 2008, January 17, 2009, January 17, 2010, and January 17, 2011.
- (4) Restricted stock award was granted on March 15, 2007 and vests at the rate of 1/4th per year on each of December 29, 2007, December 29, 2008, December 29, 2009, and December 29, 2010.
- (5) Restricted stock award was granted on March 31, 2006 and vests at a rate of 1/4th per year on each of the first, second, third and fourth anniversaries of February 24, 2006.

OPTION EXERCISES AND STOCK VESTED IN FISCAL YEAR 2008

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(2)
Gerhard F. Burbach			21,111	352,509
David V. Smith			10,001	247,319
Lawrence Cohen	30,349	420,322	4,584	69,852
David A. Lehman	20,708	301,769	3,526	53,822

- (1) Equal to the difference between the market price of the underlying securities at exercise and the exercise price of the options.
- (2) Equal to the number of shares vested multiplied by the closing price of Thoratec Common Stock on the date of vesting.

NONQUALIFIED DEFERRED COMPENSATION FOR FISCAL YEAR 2008

Name	Executive Contributions in 2008(1) (\$)	Thoratec Contributions in 2008 (\$)	Aggregate Earnings in 2008 (\$)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance at January 3, 2009 (\$)(2)
Gerhard F. Burbach					
David V. Smith			(8,081)		13,710
Lawrence Cohen	35,175		(73,160)		166,513
David A. Lehman					

- (1) All executive contributions are reported as either salary or non-equity incentive plan compensation in the Summary Compensation Table above.
- (2) All executive contributions included in the aggregate balance have been reported as either salary, non-equity incentive plan compensation, or bonus in the Summary Compensation Table above or Summary Compensation Tables in previous proxy statements.

Executive officers may elect to defer up to 50% of their base salary and up to 100% of the non-equity incentive plan compensation payable to them under the Company's Deferred Compensation Plan. These deferred compensation payments are held in accounts with values indexed to the performance of selected mutual funds or money market accounts. The executive officers select the mutual funds and money market accounts in which they invest their deferred compensation payments and they may change their selection at any time. Executive officers may elect to receive distributions from their account at a specified time prior to termination of employment or upon termination of employment with the Company. In addition, executive officers may elect a lump sum payment or annual installments over a period of up to ten years.

Potential Payments Upon Termination or Change of Control

The information below describes certain compensation that would be paid under existing plans and contractual arrangements to the Named Executive Officers in the event of a termination of such executive's employment with the Company and/or change of control of the Company. The amounts shown in the table below assume that such a termination of employment and/or change of control occurred on January 2, 2009, and thus includes amounts earned through such time and are estimates of the amounts which would be paid out to the executives upon their termination and/or a change of control (based upon the executive's compensation and service levels as of such date and the closing price of the Company's Common Stock on January 2, 2009 of \$32.02). The actual amounts to be paid out can only be determined at the time of a change of control and/or such executive's termination of employment with the Company. In addition to the benefits described below, upon any termination of employment,

each of the Named Executive Officers would also be entitled to a distribution of the amount, if any, shown in the Nonqualified Deferred Compensation for Fiscal 2008 table above.

The Company is currently party to either an employment agreement or separation benefits agreement with each of the Named Executive Officers. The following is a description of the compensation payable to the Named Executive Officers in connection with a termination of employment and/or change of control under these agreements and a table summarizing the estimated payouts assuming that a termination of employment and/or change of control occurred on January 3, 2009.

Each of the employment and separation benefits agreements with the Named Executive Officers provide the following severance benefits in the event the executive's employment with the Company is terminated by the Company without cause at any time other than during the 18-month period following a change in control: (i) a lump sum cash payment equal to one times (two times for Mr. Burbach) the executive's then current annual base salary and (ii) a monthly payment, for up to twelve months, equal to the cost of any COBRA continuation coverage elected by the executive to the same extent the Company paid for such benefits prior to the executive's termination. In addition, the employment and separation benefits agreements with Messrs. Lehman and Cohen also provide for full vesting acceleration with respect to all stock option awards held by the executive as of the date of termination (but only to the extent such awards were granted prior to April 2007) upon any termination without cause.

Each of the employment and separation benefits agreements also provide that if within 18 months following a change of control, the executive's employment is terminated by the Company without cause or by the executive for good reason, the executive would be entitled to the following severance benefits: (i) a lump sum cash payment equal to two times (2.5 times for Mr. Burbach) the sum of the executive's then current annual base salary plus the greatest of the executive's actual or target bonus for the year prior to termination or the executive's target bonus for the year of termination, (ii) full vesting acceleration with respect to all stock-based awards held by the executive as of the date of termination and (iii) a monthly payment, for up to twelve months, equal to the cost of any COBRA continuation coverage elected by the executive to the same extent the Company paid for such benefits prior to the executive's termination. These employment and separation benefits agreements also provide for immediate vesting upon a change in control of all stock-based awards that were granted prior to April 2007, except for Mr. Burbach's initial restricted stock grant which vests as to 50% immediately upon a change of control and as to the remaining 50% upon the earlier of one year after the change of control and the termination of Mr. Burbach's employment by the Company without cause or by Mr. Burbach for good reason. These employment and separation benefits agreements also provide that each executive will be entitled to reimbursement for any excise taxes imposed under Sections 280G and 4999 of the Internal Revenue Code as well as a gross-up payment equal to any income and excise taxes payable as a result of the reimbursement for the excise taxes.

The employment and separation benefits agreements with the Named Executive Officers do not provide for any additional payments or benefits upon a termination of employment by the Company for any reason other than those described above.

For purposes of these employment and separation benefits agreements, the term cause generally means: (i) the executive's material misappropriation of personal property of the Company (including its subsidiaries) that is intended to result in a personal financial benefit to the executive or to members of the executive's family, (ii) the executive's conviction of, or plea of guilty or no contest to, a felony, which the Company reasonably believes has had or will have a material detrimental effect on the Company's reputation or business, (iii) the executive's act of gross negligence or willful misconduct (including but not limited to any willfully dishonest or fraudulent act or omission) taken in connection with the performance or intentional nonperformance of any of the executive's duties and responsibilities as an executive or continued neglect of the executive's duties to the Company (including its subsidiaries), or (iv) the executive's continued willful or grossly negligent failure to comply with the lawful directions of the Company after

there has been delivered to the executive a written demand for performance from the Company that describes the basis for its belief that the executive has not substantially performed the executive's duties and the executive fails to cure such act or omission to the Company's reasonable satisfaction, if such act or omission is reasonably capable of being cured, no later than five (5) business days following delivery of such written demand.

For purposes of these employment and separation benefits agreements, the term "good reason" generally means: any material reduction in the executive's duties or salary or bonus opportunity or a requirement that the executive work at a facility more than 25 miles from the Company's current headquarters (50 miles from ITC's then current headquarters for Mr. Cohen).

For purposes of these employment and separation benefits agreements, the term "change in control" generally means: certain acquisitions by any person or group of 50% or more of the voting power of the Company's voting securities, the consummation of a sale of all or substantially all of the Company's assets, the consummation of a merger with a third party unless the Company's shareholders hold at least 50% of the voting power of the voting securities of the resulting company, or any change over a two-year period in the composition of a majority of the Board, not including directors who are nominated or elected by a majority of the incumbent directors.

The receipt of benefits following termination under these employment and separation benefits agreements is contingent upon the executive executing and not revoking a general release in favor of the Company.

Potential Payments Upon Termination or Change of Control Table

The table below sets forth the estimated value of the potential payments to each of the Named Executive Officers, assuming (a) the executive's employment had terminated on January 2, 2009 and not in connection with a change of control, (b) the executive's employment had terminated on January 2, 2009, and that a change of control of the Company also occurred on that date, and (c) a change of control of the Company occurred on January 2, 2009, but the executive's employment was not terminated.

Name/Benefit	Before Change in Control Termination Without Cause	After Change in Control Termination Without Cause or for Good Reason	Change in Control Only (no Termination)
Gerhard F. Burbach			
Termination payment (salary and/or bonus)	\$ 850,000	\$ 2,125,000	
Termination payment (COBRA)	\$ 15,404	\$ 15,404	
Vesting of stock options(1)		\$ 2,595,375	\$ 2,104,125
Vesting of restricted stock(2)		\$ 2,988,523	\$ 1,707,723
Excise tax and gross-up payment(3)		\$ 1,552,704	
David V. Smith			
Termination payment (salary and/or bonus)	\$ 351,900	\$ 1,231,650	
Termination payment (COBRA)	\$ 15,404	\$ 15,404	
Vesting of stock options(1)		\$ 1,328,833	\$ 623,336
Vesting of restricted stock(2)		\$ 1,560,975	\$ 960,600
Excise tax and gross-up payment(3)			
Lawrence Cohen			
Termination payment (salary and/or bonus)	\$ 315,000	\$ 1,071,000	
Termination payment (COBRA)	\$ 11,330	\$ 11,330	
Vesting of stock options(1)	\$ 501,200	\$ 653,960	\$ 357,650
Vesting of restricted stock(2)		\$ 704,480	\$ 373,593
Excise tax and gross-up payment(3)			

David A. Lehman

Termination payment (salary and/or bonus)	\$	260,190	\$	832,608	
Termination payment (COBRA)	\$	15,404	\$	15,404	
Vesting of stock options(1)	\$	441,144	\$	614,393	\$ 318,083
Vesting of restricted stock(2)			\$	593,219	\$ 329,054
Excise tax and gross-up payment(3)					

- (1) These amounts are calculated assuming that the market price per share of the Company's Common Stock on the date of termination of employment was equal to the closing price of the Company's Common Stock on January 2, 2009 (\$32.02) and are based upon the difference between \$32.02 and the exercise price of the options held by the Named Executive Officer.
- (2) These amounts are calculated assuming that the market price per share of the Company's Common Stock on the date of termination of employment was equal to the closing price of the Company's Common Stock on January 2, 2009 (\$32.02).
- (3) For purposes of computing the excise tax and gross-up payments, base amount calculations are based on taxable wages for the years 2004 through 2008. In addition, all of the Named Executive Officers were assumed to be subject to the maximum federal income and other payroll taxes, aggregating to a net combined effective income tax rate of 45%.

CERTAIN TRANSACTIONS

Review and Approval of Transactions with Related Persons

The Company has adopted a written policy for approval of transactions between the Company and its directors, director nominees, executive officers, greater-than-5% beneficial owners, and their respective immediate family members, where the amount involved in the transaction exceeds or is expected to exceed \$100,000 in a single calendar year.

The policy provides that the Audit Committee reviews certain transactions subject to the policy and determines whether or not to approve or ratify those transactions. In doing so, the Committee takes into account, among other factors it deems appropriate, whether the transaction is on terms that are no less favorable to the Company than terms generally available to an unaffiliated third-party under the same or similar circumstances and the extent of the related person's interest in the transaction. In addition, the Board has delegated authority to the Chair of the Committee to pre-approve or ratify transactions where the aggregate amount involved is expected to be less than \$100,000. A summary of any new transactions pre-approved by the Chair is provided to the full Committee for its review in connection with each regularly scheduled Committee meeting.

The Committee has considered and adopted standing pre-approvals under the policy for limited transactions with related persons. Pre-approved transactions include:

business transactions with other companies at which a related person's only relationship is as an employee (other than an executive officer), director or less-than-10% beneficial owner if the amount of business falls below the thresholds in the NASDAQ's listing standards and the Company's director independence standards.

contributions to non-profit organizations at which a related person's only relationship is as an employee (other than an executive officer) or director if the aggregate amount involved is less than \$100,000 or 2% of the organization's consolidated gross annual revenues, whichever is lesser.

compensation of a named executive officer or director of the Company as required to be reported under Item 402 of Regulation S-K; or if the executive officer is not an immediate family member of another executive officer or director of the Company, the related compensation would be reported under Item 402 if the executive officer was a named executive officer, and the Company's Compensation and Option Committee approved such compensation.

any transaction where the related person's interest arises solely from the ownership of the Company's Common Stock and all holders of the Company's Common Stock received the same benefit on a *pro rata* basis (*e.g.* dividends).

At least annually, a summary of new transactions covered by the standing pre-approvals described above is provided to the Committee for its review.

Transactions with Related Persons

Since December 30, 2007, there has not been, nor is there currently planned, any transaction or series of similar transactions to which we were or are a party in which the amount involved exceeds \$120,000 and in which any director, nominee for director, executive officer or holder of more than 5% of our capital stock or any member of their immediate families had or will have a direct or indirect material interest other than the compensatory transactions described above.

Indemnification Agreements

Our By-Laws provide for the indemnification by us of our agents, including our directors and officers, to the maximum extent permitted under California law. Our Company also has indemnity agreements with our directors and certain of our officers. These indemnity agreements provide that the Company will indemnify an officer or director to the maximum extent permitted under California law and prohibit us from terminating our indemnification obligations as to the acts of any officer or director occurring before his or her termination. We believe the indemnity agreements assist us in attracting and retaining qualified individuals to serve as directors and officers of our Company. The indemnifications and limitations on liability required in our By-Laws and the indemnity agreements are subject to the limitations prescribed by California law.

AVAILABLE INFORMATION

A copy of Thoratec's Annual Report on Form 10-K for the fiscal year ended January 3, 2009 is being delivered with this Proxy Statement, but is also available, without charge, upon written request to: Investor Relations, Thoratec Corporation, 6035 Stoneridge Drive, Pleasanton, CA 94588. Additional information concerning Thoratec, including its reports and other submissions filed with the SEC, is available on our website, www.thoratec.com.

OTHER MATTERS

Deadline for Receipt of Shareholder Proposals

Pursuant to Rule 14a-8 of the Exchange Act, proposals of our shareholders that they intend to present at our 2010 annual meeting of shareholders must be received by us no later than December 16, 2009 in order to be included in the proxy statement and form of proxy relating to that meeting. Pursuant to the Company's By-Laws, shareholders who wish to submit a proposal or a nomination for director that is not to be included in the Company's proxy statement and form of proxy for the 2010 annual meeting must ensure that such proposal or nomination is received by the Company not later than February 12, 2010, nor earlier than January 13, 2010. The submission of a shareholder proposal does not guarantee that it will be included in the Company's proxy statement or form of proxy card. Shareholders are also advised to review the Company's By-Laws, which contain additional requirements with respect to advance notice of shareholder proposals and director nominations.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Such officers, directors and ten percent shareholders are also required by SEC rules to furnish us with copies of all Section 16(a) forms that they file.

Based solely on our review of copies of such reports received by us, we believe that during the fiscal year ended January 3, 2009 all Section 16(a) filing requirements applicable to our officers, directors and ten percent shareholders

were satisfied.

Other Matters

We know of no other matters to be submitted at the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed proxy to vote the shares they represent as the Board may recommend.

It is important that your stock be represented at the Annual Meeting, regardless of the number of shares that you hold. Therefore, you are urged to execute and return the accompanying proxy in the envelope that has been enclosed or vote by telephone or through the internet according to the instructions included with the proxy card.

For the Board of Directors

David A. Lehman
Senior Vice President, General Counsel and Secretary

Pleasanton, California
April 15, 2009

Electronic Voting Instructions You can vote by Internet or telephone! Available 24 hours a day, 7 days a week! Instead of mailing your proxy, you may choose one of the two voting methods outlined below to vote your proxy. **VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.** Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Central Time, on May 13, 2009.

Vote by Internet Log on to the Internet and go to www.investorvote.com/THOR Follow the steps outlined on the secured website. **Vote by telephone** Call toll free 1-800-652-VOTE (8683) within the United States, Canada & Puerto Rico any time on a touch tone telephone. There is **NO CHARGE** to you for the call. Follow the instructions provided by the recorded message. Using a black ink pen, mark your votes with an X as shown in this example. Please do not write outside the designated areas.

Annual Meeting Proxy Card IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

1. Election of Directors: 01 Neil F. Dimick 02 Gerhard F. Burbach 03 J. Daniel Cole 04 Steven H. Collis 05 Elisha W. Finney 06 D. Keith Grossman 07 Paul A. LaViolette 08 Daniel M. Mulvena Mark here to vote FOR all nominees Mark here to WITHHOLD vote from all nominees For All EXCEPT To withhold authority to vote for any nominee(s), write the name(s) of such nominee(s) below.

2. Ratification of the appointment of Deloitte & Touche LLP as the Company's independent auditors for its fiscal year ending January 2, 2010. For Against Abstain

THE DIRECTORS AND THE AUDIT COMMITTEE RECOMMEND A VOTE FOR THE RATIFICATION OF THE ABOVE APPOINTMENT OF INDEPENDENT AUDITORS.

B Non-Voting Items Change of Address Please print your new address below.

C Authorized Signatures This section must be completed for your vote to be counted. Date and Sign Below Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title. Date (mm/dd/yyyy) Please print date below. Signature 1 Please keep signature within the box. Signature 2 Please keep signature within the box.

IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. Proxy Thoratec Corporation THIS PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS 2009 Annual Meeting of Shareholders to be Held on May 13, 2009 The undersigned, revoking all prior proxies, hereby appoint(s) Gerhard F. Burbach and David A. Lehman, and each of them, with full power of substitution and revocation, to represent the undersigned, with all powers which the undersigned would possess if personally present, and to vote as set forth below all shares of stock of THORATEC CORPORATION (the Company) which the undersigned would be entitled to vote if personally present at the 2009 Annual Meeting of Shareholders of the Company to be held at the Company s executive offices at 6101 Stoneridge Drive, Pleasanton, California 94588, on Wednesday, May 13, 2009 at 8:00 a.m., Pacific Daylight Time, and at any postponements or adjournments of that meeting. WHEN THIS PROXY IS PROPERLY EXECUTED, THE SHARES REPRESENTED HEREBY WILL BE VOTED AS SPECIFIED. IF NO SPECIFICATION IS MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF ALL NOMINEES AS DIRECTORS IN RESPECT OF THE ELECTION PROPOSAL, FOR PROPOSAL 2, AND IN THE DISCRETION OF THE PROXIES WITH RESPECT TO ALL OTHER MATTERS WHICH MAY PROPERLY COME BEFORE THE MEETING AND ANY AND ALL ADJOURNMENTS THEREOF. THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THE ACCOMPANYING NOTICE OF ANNUAL MEETING AND PROXY STATEMENT. WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, YOU ARE URGED TO SIGN AND PROMPTLY MAIL THIS PROXY IN THE RETURN ENVELOPE OR VOTE BY TELEPHONE OR THROUGH THE INTERNET ACCORDING TO THE INSTRUCTIONS INCLUDED WITH THE PROXY CARD SO THAT YOUR STOCK MAY BE REPRESENTED AT THE MEETING. SEE REVERSE SIDE CONTINUED AND TO BE SIGNED ON REVERSE SIDE SEE REVERSE SIDE