# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION <br> 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 $\boxtimes$

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))
区 Definitive Proxy Statement
$\square$ Definitive Additional MaterialsSoliciting Material Pursuant to §240.14a-12

## MSA Safety Incorporated

## (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):
区 No fee required.
$\square \quad$ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
(1) Title of each class of securities to which transaction applies:
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(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
(4) Proposed maximum aggregate value of transaction:
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(1) Amount Previously Paid:
(2) Form, Schedule or Registration Statement No.:
(3) Filing Party:
(4) Date Filed:


## YOUR VOTE IS IMPORTANT

Please vote by using the internet, telephone, smartphone
or by signing, dating and returning the enclosed proxy card

## The Safety Company

MSA SAFETY INCORPORATED ■ 1000 CRANBERRY WOODS DRIVE, CRANBERRY TOWNSHIP, PENNSYLVANIA 16066 • PHONE (724) 776-8600

## NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

## TO THE Holders of Common Stock of

 MSA SAFETY INCORPORATED:Notice is hereby given that the Annual Meeting of Shareholders of MSA Safety Incorporated will be held on Friday, May 17, 2019 at 9:00 A.M., local Pittsburgh time, at the MSA Corporate Center, 1000 Cranberry Woods Drive, Cranberry Township, Pennsylvania 16066 for the purpose of considering and acting upon the following:
(1) Election of Directors for 2022: The election of four directors for a term of three years;
(2) Selection of Independent Registered Public Accounting Firm: The selection of the independent registered public accounting firm for the year ending December 31, 2019;
(3) Say on Pay: To provide an advisory vote to approve the executive compensation of the Company's named executive officers; and such other business as may properly come before the Annual Meeting or any adjournment thereof.

Only the holders of record of Common Stock of the Company on the books of the Company at the close of business on February 19, 2019 are entitled to notice of and to vote at the meeting and any adjournment thereof.

You are cordially invited to attend the meeting. Whether or not you expect to attend the meeting, please vote by promptly submitting your proxy by mail, by the internet or by phone. If you attend the meeting, you may, if you wish, withdraw your proxy and vote your shares in person.

By Order of the Board of Directors,
Douglas K. McClaine Secretary

April 8, 2019

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## PROXY SUMMARY

## 2019 Annual Meeting of Shareholders

When: 9:00 a.m. EDT on May 17, 2019
Record Date: February 19, 2019
Voting: Shareholders of the Company as of the Record Date are entitled to vote on the matters presented at the meeting. Each share of common stock of the Company is entitled to one vote for each director nominee and for one vote on each of the other matters presented.

## Voting Matters

| Voting Matter |  |  | Board <br> Recommendation | Proxy Page Reference |
| :---: | :---: | :---: | :---: | :---: |
| - | Proposal No. 1 | Election of Directors | FOR each nominee | 2 |
|  | Proposal No. 2 | Selection of Ernst \& Young LLP | FOR | 58 |
|  | Proposal No. 3 | Advisory Vote to Approve Executive Compensation | FOR | 59 |

## 1. Director Nominees

Mr. Robert A. Bruggeworth, Mr. Gregory B. Jordan, Ms. Rebecca B. Roberts, and Mr. William R. Sperry were nominated by the Board for election in the Class of 2022. The table beginning on page 3 sets forth certain information about the nominees, all of whom are currently members of the Board, and about the other directors whose terms of office will continue after the Annual Meeting. We are asking shareholders to vote FOR the election of the nominees, each of whom has consented to be named as a nominee and to serve if elected.

## 2. Auditor

We are asking shareholders to approve the selection of Ernst \& Young LLP as our independent registered public accounting firm for 2019.

## 3. Advisory Vote to Approve Executive Compensation

We are asking shareholders to vote FOR the Company's compensation of the named executive officers. The Board and the Compensation Committee will take into account the outcome when considering future executive compensation arrangements. In 2018, the shareholders voted in favor of the Company's executive compensation program, with $99.2 \%$ of the votes cast by shareholders voting FOR the proposal. The Board and Compensation Committee took this vote into consideration in designing the executive compensation program for 2019. Please see the Compensation Discussion and Analysis in the proxy statement for complete details about compensation for the named executive officers.

## Your Vote is Important: Shareholders can vote using any of the following methods

BY INTERNET USING YOUR TABLET OR SMARTPHONE


BY MAILING YOUR PROXY CARD


Please refer to your proxy card and/or voting instruction form for internet, telephone, smartphone or mail instructions

## FREQUENTLY ASKED QUESTIONS

## 1. What is a proxy statement?

Certain shareholder votes take place each year at the Annual Meeting of Shareholders. Since most shareholders do not attend the annual meeting in person, we request your authorization (or your "proxy") in advance to instruct designated persons (your "proxy holders") how to vote your shares at the meeting. A proxy statement is a document we are required to give you when requesting your voting authority and instructions. Regulations of the U.S. Securities and Exchange Commission (the "SEC") also require that we include specific information about the Company in the proxy statement.

## 2. Why did I receive this proxy statement?

All shareholders of MSA Safety Incorporated as of February 19, 2019, the "record date" for this year's Annual Meeting of Shareholders, are entitled to vote at the meeting. We are furnishing this proxy statement and proxy card, along with our annual report, to all shareholders of record as of the record date.
3. What is a shareholder of record? What is a beneficial owner?

## Shareholders of Record

Shareholders can own stock directly in their own name through our transfer agent, Broadridge Corporate Issuer Solutions. Such shareholders are referred to as shareholders of record. When you are a shareholder of record, we will provide you with the proxy statement and an accompanying proxy card.

## Beneficial Owners

Shareholders can also own stock indirectly, through one or more brokers or institutions. Such shareholders are referred to as beneficial owners. When you are a beneficial owner, your stock is registered in the name of your broker or other institution. We mail proxy statements for beneficial owners to the broker or other institution. It is their responsibility to forward you the proxy statement, along with instructions about how to vote your shares. Shareholders can be both shareholders of record for some shares and beneficial owners for other shares, and may own shares through multiple brokerage or institutional accounts. Such shareholders will receive proxy materials for each account.

## Important Information for MSA Employees

MSA employees may own stock a number of ways, including but not limited to stock held as shareholder of record or as a beneficial owner as described above, and stock purchased while an employee pursuant to a MSA benefit plan such as the Employee Stock Purchase Plan (ESPP) or the MSA Stock Fund of the MSA Retirement Savings Plan (401(k)). If you hold shares in more than one of these ways, you will receive multiple sets of proxy materials. You must complete each set of proxy materials you receive in order to vote the shares covered by such materials.

## 4. What is a proxy card?

A proxy card or other voting instructions accompany each set of proxy materials. When you are a shareholder of record, we send you a proxy card along with the proxy statement. When you are a beneficial owner, the broker or other institution that holds your shares will forward you a voting instruction form. It is important to follow the instructions on each proxy card and voting instruction form you receive, or those particular shares will not be voted.

## 5. What do I do if I receive a proxy card AND voting instruction form(s)?

Please follow the voting instructions for each set of materials you receive. It is necessary to cast a vote for all sets of materials you receive or some of your shares will not be voted.
6. What happens if I do not complete a proxy or voting instruction form(s)?

If you do not complete a proxy or voting instruction form(s), then those particular shares will not be voted in director elections or the advisory vote to approve the executive compensation of the named executive officers.
7. When will the Company announce the final voting results?

The Company will file the final voting results with the SEC and publish them on our website within four business days following the Annual Meeting of Shareholders.

## MSA SAFETY INCORPORATED

PROXY STATEMENT

# Important Notice Regarding the Availability of Proxy Materials for the Shareholders Meeting to be held on May 17, 2019 

The 2019 Proxy Statement and the Annual Report to Shareholders for the year ended December 31, 2018 are also available at www.proxyvote.com

This Proxy Statement is furnished in connection with the solicitation by the Board of Directors (the "Board") of MSA Safety Incorporated (the "Company" or "MSA") of proxies in the accompanying form to be voted at the Annual Meeting of Shareholders of the Company to be held on Friday, May 17, 2019, and at any and all adjournments thereof, for the purposes set forth in the accompanying Notice of Annual Meeting of Shareholders. To vote your proxy by mail, mark your vote on the proxy card, and follow the mailing directions on the card. To vote your proxy by telephone or electronically using a smartphone, tablet or the internet, follow the instructions on the proxy card. The proxy holders will vote your shares according to your directions. If you sign and return your proxy card but do not mark any selections, your shares represented by that proxy will be voted as recommended by the Board.

We encourage you to vote by proxy as soon as possible. A shareholder giving the accompanying proxy by mail has the power to revoke or change it at any time prior to its exercise upon written notice given to the Secretary of the Company. Please note that, in order to be effective, the revocation or change must be received by 11:59 p.m. EDT on May 16, 2019. The mailing address of the principal executive offices of the Company is 1000 Cranberry Woods Drive, Cranberry Township, PA 16066. A shareholder voting the proxy by telephone or internet has the power to revoke or change such proxy vote by voting again and following the instructions and meeting the deadlines for such vote as set forth on the proxy card.

## VOTING SECURITIES AND RECORD DATE

As of February 19, 2019, the record date for the Annual Meeting, 38,529,585 shares of Common Stock were issued and outstanding.
Only holders of Common Stock of the Company of record on the books of the Company at the close of business on February 19, 2019, are entitled to notice of and to vote at the Annual Meeting and at any adjournment thereof. Such holders are entitled to one vote for each share held and do not have cumulative voting rights with respect to the election of directors. Holders of outstanding shares of the Company’s $41 / 2 \%$ Cumulative Preferred Stock are not entitled to vote at the meeting.

See "Stock Ownership" on page 56 below for information with respect to share ownership by the directors and executive officers of the Company and the beneficial owners of 5\% or more of the Company's Common Stock.

## PROPOSAL NO. 1

## ELECTION OF DIRECTORS

At the Annual Meeting, four directors will be elected to serve until the Annual Meeting in 2022. Messrs. Gregory B. Jordan and William R. Sperry, who were elected as directors by the Board in 2019, were nominated by the Board for election in the Class of 2022, along with Mr. Robert A. Bruggeworth and Ms. Rebecca B. Roberts.

Mr. Sperry was elected to be a director by the Board on January 22, 2019, and Mr. Jordan was elected to be a director by the Board on February 25, 2019.

Messrs. Jordan and Sperry were elected at the conclusion of a director recruitment process led by the Nominating and Corporate Governance Committee of the Board. Among other steps, as part of the recruitment process a set of director recruitment criteria was established, potential candidates were evaluated, and a series of interviews with Committee and Board members were held, following which the Committee formed its recommendations to the Board. Following the selection process, Messrs. Jordan and Sperry were elected by the Board. The Company is now requesting the shareholders to re-elect Messrs. Jordan and Sperry. Director L. Edward Shaw Jr. will retire from the Board of Directors in May 2019, pursuant to the Board's director retirement policy, following 21 years of service on the Board. Director Alvaro Garcia-Tunon has elected not to seek re-nomination to the Board, and will leave the Board at the conclusion of his term in May 2019, following seven years of service.

The Board of Directors and its Nominating and Corporate Governance Committee recommend a vote FOR the election of the nominees, each of whom has consented to be named as a nominee and to serve if elected. Properly submitted proxies that are timely received will be voted for the election of the nominees named below, unless otherwise directed thereon, or for a substitute nominee designated by the Nominating and Corporate Governance Committee in the event a nominee named becomes unavailable for election.

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The following table sets forth certain information about the nominees, all of whom are currently members of the Board, and about the other directors whose terms of office will continue after the Annual Meeting.

Nominees for terms expiring in 2022
Robert A. Bruggeworth, President and Chief Executive Officer, and a Director of Qorvo, Inc. (high-performance RF components and compound semiconductors manufacturer) since January 2015. Prior to the merger of RF Micro Devices, Inc. ("RFMD") and TriQuijnt Semiconductor, Inc. to form Qorvo, Inc., he was President and CEO of RFMD.
Qualifications: As the CEO of a publicly traded international corporation, Mr. Bruggeworth brings to the Company's board specific expertise in managing a large, global business, along with specific expertise in mergers and acquisitions, manufacturing, marketing and material sourcing for high technology products. Committees: Compensation, Nominating and Corporate Governance.


Gregory B. Jordan, Executive Vice President, General Counsel, and Chief Administrative Officer of The PNC Financial Services Group, Inc., since February 2016; prior thereto, Mr. Jordan was Executive Vice President and General Counsel since October 2013. Prior to his roles with The PNC Financial Services Group, Inc., Mr. Jordan was the global managing partner of Reed Smith LLP and chairman of the senior management team and executive committee of the firm. Qualifications: As the General Counsel and Chief Administrative Officer of a large publicly traded corporation, and as the former managing partner for a global law firm, Mr. Jordan has broad experience in overseeing a large publicly traded corporation, along with extensive global legal expertise.


Rebecca B. Roberts, Retired (2011); formerly President of Chevron Pipe Line Company since 2006, a wholly owned subsidiary of Chevron Corp. (a petroleum producer), managing more than 10,000 miles of oil and petroleum products pipelines throughout North America; prior thereto, Ms. Roberts was President of Chevron Global Power Generation, maintaining a portfolio of commercial power plants in the U.S., Asia and Europe; currently a Director of Black Hills Corporation and AbbVie Inc.
Qualifications: As the former President of a large oil and gas company, combined with her prior international executive leadership positions, Ms. Roberts brings to the Company's board significant international business management, operations and workplace safety expertise, along with extensive oil, gas and petrochemical industry expertise.
Committees: Compensation (Chair); Nominating and Corporate Governance


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## Continuing Directors with terms expiring in 2021

Thomas W. Giacomini, Chairman, President and CEO of JBT Corporation (a leading global technology solutions provider to the food and aviation industries) since May 2014; prior thereto, Mr. Giacomini was President and CEO of JBT Corporation from September 2013 to May 2014. Prior to his roles with JBT Corporation, Mr. Giacomini served as President and CEO of Dover Engineered Systems (a segment of 14 diversified industrial companies for Dover Corporation).
Qualifications: Mr. Giacomini is presently the CEO of a publicly traded international corporation, bringing to the Company's board specific expertise in managing a large, diversified global manufacturing business, along with specific expertise in management, manufacturing, and engineering. Committees: Audit; Compensation


Director Since: 2017

Sandra Phillips Rogers, Group Vice President, General Counsel, Chief Legal Officer and Corporate Secretary for Toyota Motor North America, Inc. ("TMNA") (a leading automobile manufacturer and seller) since April 2017; prior thereto, Ms. Rogers was Group Vice President, General Counsel and Chief Legal Officer of TMNA from April 2015 to April 2017; Vice President and Deputy General Counsel for Toyota Motor Sales, U.S.A., Inc. ("TMS") from July 2014 to March 2015; and Vice President and Assistant General Counsel for TMS from June 2012 to July 2014. Prior to joining Toyota, Ms. Rogers was a partner at the global law firm of Morgan, Lewis \& Bockius.
Qualifications: Given her substantial legal experience, along with her executive experience, Ms. Rogers offers the board strong expertise in the legal and operational aspects of managing a large manufacturing company.
Committees: Audit; Law


Age: 53
Director Since: 2017

John T. Ryan III, Retired (2008); formerly Chief Executive Officer and Chairman of the Company.
Qualifications: Mr. Ryan joined MSA in 1969 and held numerous executive positions throughout his tenure with the Company. He retired as Chief Executive Officer in 2008 after four decades of employment with the Company. Mr. Ryan remains on the board as a director. As the former CEO and long tenured senior executive for the Company, Mr. Ryan brings to the board extensive leadership experience and specific expertise in corporate strategy oversight and execution, as well as extensive safety products industry expertise, particularly in international markets.
Committees: Finance; Law


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Nishan J. Vartanian, President and Chief Executive Officer of the Company since May 2018. Prior thereto, Mr. Vartanian was President and Chief Operating Officer since June 2017; Senior Vice President and President, MSA Americas from July 2015 to June 2017; and Vice President and President, MSA North America from August 2013 to July 2015.
Qualifications: Mr. Vartanian has served MSA as an employee for 33 years, joining the company as a sales representative, and has worked in a number of executive management capacities over the past seven years. As the Company's President and Chief Executive Officer, and given his long tenure with the Company, Mr. Vartanian brings to the board extensive experience in the Company's business with particular expertise in the oversight and execution of the Company's business strategy, along with product development, marketing, sales, finance and the global safety products industry.


Diane M. Pearse, Chief Executive Officer and President, Hickory Farms, LLC (a specialty foods company) since March 2016. Ms. Pearse was Chief Operating Officer, Garrett Brands, LLC from May 2015 to March 2016, and prior thereto, Ms. Pearse was Senior Vice President, Operations and Merchandising for Redbox Automated Retail, LLC (a fully automated DVD rental company).
Qualifications: Ms. Pearse brings extensive financial, accounting, and operational expertise to the Company's board, given her substantial financial oversight experience and business leadership for several large consumer products and retail companies.
Committees: Audit; Compensation; Finance (Chair); Law


William M. Lambert, Retired (2018); presently Non-Executive Chairman of the Board; formerly Chairman and Chief Executive Officer of the Company; Mr. Lambert was elected Chairman in May 2015 and prior thereto was President and Chief Executive Officer. Mr. Lambert is currently a Director of Kennametal Inc. and EQT Corporation.
Qualifications: Mr. Lambert served MSA as an employee for over 35 years, joining the company as a design engineer, and worked in a number of executive capacities for more than 20 years. As a former CEO of the Company, and given his long tenure with the Company, Mr. Lambert brings to the board extensive experience in the Company's business with particular expertise in the oversight and execution of the Company's business strategy, along with product development, marketing, finance and the global safety products industry.


## Director Independence

The Board has determined that each of directors Bruggeworth, Garcia-Tunon, Giacomini, Jordan, Pearse, Roberts, Rogers, Ryan, Shaw and Sperry is an independent director. An independent director is a director who has no material relationship with the Company, either directly or as a partner, shareholder or officer of an organization that has a relationship with the Company. The independent directors have specifically considered and determined that Mr. Ryan, who retired as CEO of the Company over ten years ago, is an independent director. One reason for this is that, given Mr. Ryan's substantial ownership interest in MSA (see Stock Ownership, page 56 below), he is particularly aligned in independently representing the interests of shareholders.

In making its independence determinations, the Board reviewed the director's individual circumstances, the corporate governance standards of the New York Stock Exchange and the Board's independence standards. These standards are available in the Corporate Governance section of the Company's internet website at www.MSAsafety.com. They are summarized below.

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## Disqualifying Relationships

The following relationships are considered to be material relationships that would impair a director's independence:

- If a director is an employee or has an immediate family member who is an executive officer of the Company, the director is not independent until three years after the end of the employment relationship.
- If a director or an immediate family member receives more than $\$ 120,000$ per year in direct compensation from the Company, the director is not independent until three years after the director or family member ceases to receive such compensation. Disqualifying compensation does not include director and committee fees, pension or deferred compensation for prior service or compensation received by an immediate family member for service as a non-executive officer employee.
- If:
- the director is a partner of or employed by, or the director's immediate family member is a partner of, the firm that is the present internal or external auditor of the Company;
- the director's immediate family member is employed by the firm that is the present internal or external auditor of MSA and such family member personally works on the Company's audit; or
- the director, or the director's immediate family member, was within the last three years a partner or employee of the present internal or external auditor of MSA and personally worked on the Company's audit within that time.
- If a director or an immediate family member is an executive officer of another company, and any of the Company's present executives serves on that company's compensation committee, the director is not independent until three years after the end of such employment or service.
- If a director is an employee or an immediate family member is an executive officer of a company that makes payments to or receives payments from the Company for property or services, and the amount of such payments in a fiscal year exceeds the greater of $\$ 1$ million or $2 \%$ of the other company's consolidated gross revenue, the director is not independent until three years thereafter.


## Non-Disqualifying Relationships

The following relationships are not considered to be material relationships that would impair a director's independence:

- A director is an executive officer of another company that is indebted to the Company, or to which the Company is indebted, in an amount less than $5 \%$ of the other company's total consolidated assets;
- A director is an executive officer of another company in which the Company owns a common stock interest less than $5 \%$ of the other company's total shareholders' equity;
- A director serves as an executive officer of a charitable organization, and the Company's discretionary contributions to the organization are less than $2 \%$ of the organization's annual revenue; or
- A director is an executive officer of another company that owns a common stock interest in the Company.


## Other Relationships

The Board will annually review commercial and charitable relationships of directors. If a relationship is not one of the non-disqualifying relationships described above, the determination of whether the relationship is material or not, and therefore whether the director is independent or not, is made by the directors who satisfy the independence guidelines set forth under the two preceding captions.

For example, if a director is the executive officer of a charitable organization, and the Company's discretionary contributions to the organization are more than $2 \%$ of that organization's annual revenue, the independent directors will determine, after considering all of the relevant circumstances, whether the relationship is material, and therefore whether or not the director should be considered independent. The Company will explain in its proxy statement the basis for any Board determination that a relationship is not material, despite the fact that it does not meet one of the safe-harbors under "Non-Disqualifying Relationships" above.

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## Independence Determinations for Compensation Committee Members

In affirmatively determining the independence of any director who will serve on the Compensation Committee, the Board will consider all factors specifically relevant to determining whether the director has a relationship to the Company which is material to the director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the Company to such director, and (ii) whether such director is affiliated with the Company, a subsidiary of the Company, or an affiliate of a subsidiary of the Company.

## Corporate Governance Matters

The Board places a continued focus upon the corporate governance affairs of the Company and acknowledges that good corporate governance is an ongoing process. The Board also recognizes that good corporate governance is important to the Company’s success. Key Company governance practices are described below.

## Corporate Governance Guidelines

The Board has adopted Corporate Governance Guidelines which cover a wide range of subjects, such as the role of the Board and its responsibilities, Board composition and election, operations and committees, chairman and lead director responsibilities, director compensation, director retirement, Board and management evaluation and succession planning, director orientation and training, and shareholder communications with the Board. The Corporate Governance Guidelines, as well as the charters of the Board's Audit, Compensation, Nominating and Corporate Governance, Finance and Law Committees and the Company's Global Code of Business Conduct for directors, officers and employees, are available in the Corporate Governance section of the Company's internet website at www.MSAsafety.com. Such material will also be furnished without charge to any shareholder upon written request to the Corporate Secretary at the Company's address appearing on page one.

## Board Leadership

The Board presently separates the positions of Chairman of the Board and Chief Executive Officer. Mr. Lambert, who retired as Chief Executive Officer of the Company in May 2018, serves as Non-Executive Chairman. Prior to his retirement, Mr. Lambert was Chairman and Chief Executive Officer from May 2015. Mr. Ryan served as Non-Executive Chairman until May 2015. The Chairman is elected annually by the Board at its organizational meeting in May.

The Board periodically reviews its leadership structure and did so in May 2018. The Board believes that Mr. Lambert is presently best positioned to serve as Non-Executive Chairman given his familiarity with the Company's business, the safety products industry, and his previous oversight and execution of the Company's corporate strategy. The Board also believes that this structure enables Mr. Vartanian, who was elected Chief Executive Officer in May 2018, to focus on managing the Company. The Board has combined the roles in the past and may choose to do so again in the future. The decision by the Board on whether to combine or separate the roles is based upon the needs of the Company and Board at a given time.

The Board also believes that it is in the best interests of the Company to maintain effective independent board oversight. Accordingly, the Board annually selects a lead independent director (the "lead director") to further augment its corporate governance practices. Mr. Bruggeworth has served as lead director since May 2017.

The Chairman presides at Board meetings and, among other responsibilities, collaborates with the CEO and lead director to establish the annual Board calendar and set meeting objectives and agendas; is available, when requested by the Board or CEO, and as appropriate, for consultation and direct communication with shareholders and to represent the Board with special groups, government representatives, or community organizations; works with the CEO to ensure that meeting agenda items, goals and objectives are clearly defined and met, and oversees the prioritization and appropriate follow-through on Board requested actions from meeting to meeting; ensures appropriate balance and focus in Board meetings and that time is appropriately managed on topics to be covered; ensures that contributions are made by all directors during Board meetings, that differences of opinion are freely expressed, and that discussion is driven to timely conclusion while building consensus as appropriate; chairs the annual meeting of shareholders; and carries out other responsibilities as may be set forth in the Corporate Governance Guidelines or requested from the Board from time to time.

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The lead director serves as a principal liaison between the independent directors and the CEO, including regular communications with directors to obtain their views and advice, working to improve Board performance, facilitating communications among directors, and communicating to the CEO and the Non-Executive Chairman the concerns of the independent directors. The lead director also, among other responsibilities, convenes meetings of the independent directors as necessary, presides at all executive sessions of the Board's independent directors, and helps to set a balanced tone for director feedback; presides at Board meetings at which the Non-Executive Chairman is not present; facilitates discussion and open dialogue among the independent directors, and as needed, one-on-one discussions between meetings; takes an active role, along with the Nominating and Corporate Governance Committee Chair, to address matters that may arise with respect to specific directors; collaborates with the Non-Executive Chairman and the CEO to prepare and approve schedules and agendas for Board meetings, ensuring that input is received from directors and management; retains outside advisors to be engaged by the Board on board-wide matters, as needed; together with the Chair of the Compensation Committee, contributes to the annual performance evaluation summary of the CEO and participates in its communication to the CEO; pays particular attention to assuring that the Board adequately addresses long term strategy, long term performance, risk management, and succession planning; and takes an active role, if not the leading role, in CEO succession planning.

The Board maintains an active structure of independent director leadership. In furtherance of this, the Corporate Governance Guidelines provide that it is the Company's practice for directors to meet at each Board meeting in executive session, with no members of management present. The lead director chairs the executive sessions. The audit, compensation, nominating and corporate governance, finance and law committees are also each comprised solely of independent directors, as defined by the director independence standards of the New York Stock Exchange and the Board’s independence standards.

## Board, Committee, Individual Director and Lead Director Assessments

The Nominating and Corporate Governance Committee oversees self-assessment processes for the Board and the audit, compensation and nominating and corporate governance committees, along with peer assessments for each director, the Non-Executive Chairman, and the lead director. The purpose of the Board and committee assessments is to continually enhance the effectiveness of the Board and its committees. The Board self-assessment gathers feedback on a range of topics such as the Board's overall effectiveness, governance structure, board and management dynamics, meeting administration, and other topics. The committee self-assessments are tailored to the specific roles and responsibilities of each committee.

The purpose of the individual director, Non-Executive Chairman, and lead director peer assessments is to provide feedback to each director, enabling them to continually enhance their performance, and to inform the Nominating and Corporate Governance Committee as to each director's fitness for re-nomination.

The Board, committee, Non-Executive Chairman, and lead director assessments are conducted annually. The individual director peer assessments are conducted two out of every three years for each director, to coincide with the Board's classified structure.

## Director Tenure, Succession and Recruitment

The Board periodically considers its composition and acknowledges the importance of board refreshment. The present mix of director tenures provides the Board with the contribution of new and diverse ideas while ensuring continuity and insight developed through a deep understanding of the Company and its industry. Messrs. Jordan and Sperry have served less than one year; Ms. Rogers and Messrs. Giacomini and Vartanian have served for less than two years; Ms. Roberts has served for five years; Mr. Bruggeworth, Mr. Lambert and Ms. Pearse have served from 11 to 15 years; and Mr. Ryan has served for more than 15 years.

The Nominating and Corporate Governance Committee is responsible for identifying and reviewing potential director candidates and for recommending nominees to the Board. The Committee will consider director candidate recommendations from a variety of sources, including from a shareholder, a non-management director, the chief executive officer, any other executive officer, a third party search firm, or other appropriate sources. In evaluating all potential candidates, the Committee is guided by an executive skills matrix of the Company's current directors to identify specific needs, and a defined list of director recruitment criteria maintained by the Committee. The fundamental criterion for selecting a prospective director is the ability to contribute to the well-being of the Company and its shareholders. Good

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judgment, integrity and a commitment to the mission of the Company are essential. Other criteria include independence under the Board's independence standards, a commitment to the mission and values of the Company, applicable business and financial experience, current chief executive officer or other "C-Suite" experience, merger and acquisition experience, additional public company board experience and other criteria. The Committee may revise and/or prioritize its director recruitment criteria depending on the current needs of the Board and the Company.

In preparing its candidate recommendations to the Board, the Committee also considers, but does not choose solely on the basis of, the distinctive experiences and perspectives of diverse candidates. In evaluating diversity, the Committee and the Board consider not only race, national origin, and gender diversity, but also the need for a Board that represents diverse experience at policy making levels in business, past professional accomplishments, and other factors when recommending prospective directors for the Company. The director recruitment criteria described above, including diversity, are considered by the Committee each time a new candidate is reviewed for Board membership.

## Director Resignation Policy

The Board has adopted a resignation policy with respect to uncontested director elections. In accordance with this resignation policy, a director nominee who does not receive a majority of the votes cast in an uncontested election of directors must promptly tender a resignation to the Board. The Board's procedures for identifying an uncontested election of directors, determining the majority of votes cast, and responding to a tender of resignation, are specified in the Corporate Governance Guidelines, which are available in the Corporate Governance section of the Company's website at www.MSAsafety.com.

## Director Retirement

Pursuant to the Board's existing retirement policy as set forth in the Corporate Governance Guidelines, directors are expected to retire from the Board at the annual meeting of shareholders in the year of their 75th birthday, subject to the authority of the Board to ask a director to serve past the normal retirement date if the Board determines that doing so is in the best interests of the Company. The policy includes an exception, pursuant to which directors beneficially owning five percent or more of the Company's common stock are exempt from the policy. Only one director presently qualifies for this exception.

## Meeting Attendance

The Board met five times during 2018. All directors attended at least $75 \%$ of the combined total of the meetings of the Board and of all committees on which they served. Directors are expected to attend the Annual Meeting of Shareholders. All directors attended last year's annual meeting.

## Board Committees

The Board has established an Audit Committee, a Compensation Committee, a Nominating and Corporate Governance Committee, a Finance Committee, a Law Committee and certain other committees. Each committee specified below presently consists of the directors listed. Committee appointments will expire at the 2019 organizational meeting of the Board which takes place following the Annual Meeting of Shareholders. At the organizational meeting of the Board, committee appointments will be made for the following year.

The Audit Committee presently consists of directors Garcia-Tunon (Chair), Giacomini, Pearse and Rogers. The Audit Committee, which met six times during 2018, assists the Board in fulfilling its oversight responsibility relating to the integrity of the Company's financial statements and financial reporting process. The Committee selects and recommends annually to the Board and the shareholders the independent registered public accounting firm to audit the Company's financial statements, approves in advance all audit and non-audit services performed by the independent registered public accounting firm, reviews the plans, findings and recommendations of the independent registered public accounting firm, and reviews and evaluates the performance of the independent registered public accounting firm, its independence and its fees. The Committee reviews and discusses with management and the independent registered public accounting firm the Company's financial statements and reports and its internal and disclosure controls and matters relating to the Company's

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internal control structure. The Committee oversees the Company's Global Code of Business Conduct and related Company programs governing legal and regulatory compliance, which includes a periodic review with management of the implementation and effectiveness of the Company's compliance programs. The Committee, along with the Board, also oversees the Company's enterprise risk management program. Pursuant to this program, the Committee reviews with management the Company's analyses of risks and contingency plans on a bi-annual basis. The Board has determined that each of directors Garcia-Tunon and Pearse is an "audit committee financial expert," as defined by the rules of the Securities and Exchange Commission.

The Compensation Committee presently consists of directors Bruggeworth, Giacomini, Pearse, and Roberts (Chair). The Compensation Committee, which met six times in 2018, reviews and recommends (to the independent directors for approval) the annual goals, performance and compensation of the Company's chief executive officer, reviews and approves the compensation of all other executive officers and other key executives, monitors the effectiveness of all other employee benefit offerings, manages the Company's overall compensation strategy and compensation plans, assesses any risk inherent in these plans and attempts to ensure that such risk is not excessive and is acceptable to the Company and employs, compensates and oversees the Company's external compensation consultant and assures its independence. The Compensation Committee also administers the Company's Amended and Restated 2016 Management Equity Incentive Plan and predecessor equity plans (collectively, the "Management Equity Plans").

The Nominating and Corporate Governance Committee presently consists of directors Bruggeworth, Roberts, and Shaw (Chair). The Committee, which met three times in 2018, reviews and makes recommendations to the Board regarding the composition and structure of the Board, criteria and qualifications for Board membership, director compensation and evaluation of current directors and potential candidates for director. The Committee maintains formal processes for evaluating the performance of the Board, the lead director, and the individual directors. It is also responsible for establishing and monitoring policies and procedures concerning corporate governance. Further information concerning the Nominating and Corporate Governance Committee and its procedures appears below. The Nominating and Corporate Governance Committee and the Board continually assess the Company's Corporate Governance Guidelines and the corporate governance practices of the Board.

The Finance Committee presently consists of directors Garcia-Tunon, Pearse (Chair), Ryan and Shaw. The Committee, which met two times in 2018, reviews and makes recommendations to the Board regarding the Company's capital structure, dividend policy, financing activities, hedging policies and practices, funding of the Company's employee benefit plans, liquidity management, corporate financial plans, and strategic financial analyses as requested by the Board.

The Law Committee presently consists of directors Garcia-Tunon, Pearse, Rogers, Ryan and Shaw (Chair). The Committee, which met three times in 2018, reviews legal matters that could present significant financial risk to the Company.

## Risk Oversight

The Board as a whole exercises oversight of the Company's strategic risks and other risks identified through the Company's enterprise risk management program. Strategic risks are identified in the course of the Board's review and approval of the Company's plans and there is regular monitoring of the Company's performance against the strategic objectives including customer satisfaction metrics as well as periodic review of the activities of competitors. The Board, directly and through its Audit Committee, also has oversight of the enterprise risk management program which is managed by the Chief Financial Officer. The enterprise risk management program is designed to enable effective and efficient identification and management of critical enterprise risks and to facilitate the incorporation of risk considerations into decision making. The Director of Investor Relations is responsible for leading the formal risk assessment and reporting process within the Company. Through consultation with the Company's executive leadership, the Director of Investor Relations periodically assesses the major risks facing the Company and works with the executive leadership team and others responsible for managing each risk to identify and consider appropriate mitigation elements to each risk, and develop risk contingency plans as appropriate. This analysis is reviewed two times each year with the Audit Committee and annually with the full Board, and input from the Board is considered in the analysis. Emerging risks are discussed as needed.

In addition to the Board oversight described above, each committee has various risks that it oversees. For example, the Audit Committee is responsible for reviewing the Company's risk management policies and procedures, as well as its major

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financial risk exposures, and the processes management has established to monitor and control such exposures. The Compensation Committee monitors risk inherent in the Company's compensation policies, compensation practices, and similar matters related to the recruitment and retention of employees, and periodically receives educational legislative and regulatory updates. The Nominating and Corporate Governance Committee monitors risks related to Board performance and the Company's governance practices.

The Compensation Committee has evaluated the risks arising from the Company's compensation policies and practices for its employees. This included a review of examinations by Pay Governance, LLC, the Compensation Committee's compensation consultant, of the compensation philosophy, design, governance and administration of compensation policies and practices provided to MSA's executives. The review also considered information developed by management regarding programs provided to other non-executive employees. Based on this, the Committee concluded again in 2018 that the risks arising from the Company's compensation policies and practices for its employees are not reasonably likely to have a material adverse effect on the Company.

## Compensation of Directors

The following table shows the compensation earned by the Company's non-employee directors for services during 2018:

| Name | Fees Earned or Paid in Cash |  | Restricted Stock Award (2) |  | Changes in Pension Value (3) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Robert A. Bruggeworth | \$ | 105,000 | \$ | 120,005 | - | \$225,005 |
| Alvaro Garcia-Tunon | \$ | 90,000 | \$ | 120,005 | - | \$210,005 |
| Thomas W. Giacomini | \$ | 75,000 | \$ | 120,005 | - | \$195,005 |
| William M. Lambert(1) | \$ | 78,626 | \$ | 120,005 | - | \$198,631 |
| Diane M. Pearse | \$ | 80,000 | \$ | 120,005 | - | \$200,005 |
| Rebecca B. Roberts | \$ | 87,500 | \$ | 120,005 | - | \$207,505 |
| Sandra Phillips Rogers | \$ | 75,000 | \$ | 120,005 | - | \$195,005 |
| John T. Ryan III | \$ | 75,000 | \$ | 120,005 | - | \$195,005 |
| L. Edward Shaw Jr. | \$ | 90,000 | \$ | 120,005 | - | \$210,005 |
| (1) Reflects prorated c |  | 2018. |  |  |  |  |

(1) Reflects prorated cash compensation based upon Mr. Lambert becoming a non-executive director on June 1, 2018.
(2) Represents the aggregate grant date fair value of the restricted stock awards computed in accordance with FASB ASC Topic 718.
(3) Represents the amount of the aggregate increase for 2018 in the actuarial present value of the director's accumulated benefits, if any, under the Retirement Plan for Directors described below. Only Messrs. Ryan and Shaw are entitled to benefits under such Plan.

For 2018, the Company paid non-employee directors a base retainer on a quarterly basis which totaled \$75,000 for the year ("Annual Base Retainer"), which for Mr. Lambert was prorated to $\$ 43,681$ based upon the June 1, 2018 date on which he retired as Chief Executive Officer. The Company paid the lead director an additional retainer of $\$ 30,000$. The Company paid the Non-Executive Chairman an additional retainer of $\$ 60,000$, which for Mr. Lambert was prorated to $\$ 34,945$ based upon the June 1, 2018 date on which he became Non-Executive Chairman. The additional annual retainer for the Audit Committee chair was $\$ 15,000$, for the Compensation Committee chair was $\$ 12,500$, for the Nominating and Corporate Governance and Law Committee chair was $\$ 7,500$, and for the Finance Committee chair was $\$ 5,000$.

Non-employee directors are required to meet a share ownership guideline, equivalent to five times the Annual Base Retainer. Presently, all directors exceed the ownership guidelines except for Messrs. Giacomini, Jordan and Sperry and Ms. Rogers, each of whom was recently elected to the Board.

Under the 2017 Non-Employee Directors' Equity Incentive Plan and its predecessors (collectively, the "Director Equity Plans"), the Company grants stock options, restricted stock, or a mix of each, to each non-employee director on the third business day following each annual meeting. Pro rata awards are authorized under the 2017 plan for directors who join the Board during the period between annual awards. The purposes of the Director Equity Plans are to enhance the mutuality of interests between the Board and the shareholders by increasing the share ownership of the non-employee directors and to assist the Company in attracting and retaining able persons to serve as directors. The total number of shares that may be issued under the 2017 plan is limited to 150,000 shares of Common Stock.

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Stock option grants, if awarded, are made using a Black-Scholes option pricing model. The exercise price of the options is equal to the market value on the grant date. The options become exercisable three years from the grant date and expire ten years from the grant date. If a director resigns or is removed from office for cause, options which have not yet become exercisable are forfeited and exercisable options remain exercisable for 90 days. However, under the 2017 plan, if a director is removed from office for cause, any outstanding option held by the director is forfeited on the date of removal. Otherwise, unexpired options may generally be exercised for five years following termination of service as a director, but not later than the option expiration date. Restricted shares vest on the date of the third annual meeting following the grant date. Unvested shares are forfeited if the director terminates service for reasons other than death, disability or retirement.

On May 18, 2018 each non-employee director was granted 1,317 shares of restricted stock. Stock options were not granted to non-employee directors in 2018.

It is the practice of the Nominating and Corporate Governance Committee to periodically engage an independent compensation consultant to review the compensation of the non-employee directors. A consultant was engaged in 2018. Following the Committee's review of director compensation and the consultant's report, the Board determined that, for 2019, director compensation would remain the same, except as follows: the annual base retainer will be $\$ 80,000$; the Finance Committee Chair retainer will be $\$ 7,500$; and the equity compensation component will have a grant date value of $\$ 130,000$.

Prior to April 1, 2001, a director who retired from the Board after completing at least five years of service as a director was entitled to receive a lifetime quarterly retirement allowance under the Retirement Plan for Directors. The amount of the allowance was equal to the quarterly directors' retainer payable at the time of the director's retirement. Payment began when the sum of the director's age and years of service equaled or exceeded 75 . Effective April 1, 2001, plan benefits were frozen so that the quarterly retirement allowance, if any, payable to future retirees will be limited to $\$ 5,000$ (the quarterly retainer amount in April 2001), multiplied by a fraction, of which the numerator is the director's years of service as of April 1, 2001 and the denominator is the years of service the director would have had at the date the sum of the director's age and years of service equaled 75 .

Other than the amounts earned by Mr. Ryan while he was an employee of the Company prior to the Retirement Plan for Directors being frozen as described above, directors who are employees of the Company or a subsidiary do not receive other additional compensation for service as a director.

## Compensation Committee Interlocks and Insider Participation

There are no interlocking relationships, as defined in regulations of the Securities and Exchange Commission, involving members of the Compensation Committee.

Directors Bruggeworth, Giacomini, Pearse, and Roberts (Chair) served as members of the Compensation Committee during 2018. The Board has determined that each of these directors is independent in accordance with the listing standards of the New York Stock Exchange.

## Review and Approval or Ratification of Related Party Transactions

The Company has a policy on related party transactions which operates along with the conflicts of interest section of the Company's Global Code of Business Conduct. Copies of the policy on related party transactions and the Code are available in the Corporate Governance section of the Company's internet website at www.MSAsafety.com.

The Company's directors, officers and other employees must be free from any personal influence, interest or relationship, or appearance thereof, in situations that might conflict with the best interests of the Company. Directors, officers and employees must fully disclose in advance any circumstance that may create a conflict of interest, including a related party transaction, so that an appropriate determination can be made as to whether it would violate the policy on related party transactions or the Code.

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In general, the related party transactions policy covers any transaction, arrangement or relationship in which the Company is a participant and the amount involved exceeds $\$ 120,000$, and in which any "related person" had or would have a direct or indirect material interest. A related person is any executive officer, director or nominee, any owner of $5 \%$ or more of the Company's voting securities or an immediate family member of any of the foregoing. The policy covers indirect material interests, but excludes certain relationships and pre-approved transactions.

Any officer, director or employee of the Company who is aware of a proposed transaction that may violate the policy must bring such transaction to the notice of the Chief Legal Officer and Chief Financial Officer of the Company. If the Chief Legal Officer or Chief Financial Officer determines that the proposed transaction could be a related party transaction, the matter will be submitted to the Nominating and Corporate Governance Committee to consider all material facts of the transaction. The Committee is charged with taking a number of items into account as set forth in the policy and determining whether the transaction is indeed a related party transaction and if so, whether it should be approved in any particular case. The types of matters which the Committee will take into account are:

- the nature of the related party's interest in the transaction;
- the material terms of the transaction, including the amount and type of the transaction;
- the importance of the transaction to the related party;
- the importance of the transaction to the Company;
- whether the terms of the transaction are comparable to those of similar transactions not involving related parties; and
- whether the transaction would impair the judgment of a director or executive officer to act in the best interests of the Company.

The Committee chair will report on any decision at the next meeting of the Board.
Mr. Jordan is the Executive Vice President, General Counsel and Chief Administrative Officer of The PNC Financial Services Group, Inc. ("PNC"), a company with which the Company presently maintains certain business dealings, including as a borrower under a Third Amended and Restated Credit Agreement pursuant to which PNC serves as administrative agent and a lender. Total amounts paid by MSA to PNC in 2018 were approximately $0.02 \%$ of PNC's 2018 revenues. The Board of Directors determined that the relationship was not material because, among other things, (a) the amounts paid to PNC were de minimis to the consolidated gross revenues of PNC, (b) the Company's credit agreement with PNC was negotiated at arms-length in the ordinary course of business at market terms, and was completed prior to the Company's consideration of Mr. Jordan for a position as a member of the Board, and (c) the Company has maintained a relationship with PNC for many years prior to Mr. Jordan's employment at PNC and prior to his election to the Board.

## Nominating and Corporate Governance Committee Procedures

The current members of the Nominating and Corporate Governance Committee are directors Bruggeworth, Roberts and Shaw (Chair), whose terms as Committee members will expire at the 2019 organizational meeting of the Board to be held on the date of the Annual Meeting of Shareholders. The Board has determined that each of the current members of the Committee is independent in accordance with the listing standards of the New York Stock Exchange.

The Committee will consider director candidate recommendations from a variety of sources, including from a shareholder, a non-management director, the chief executive officer, any other executive officer, a third party search firm, or other appropriate sources. Any shareholder who desires to have an individual considered for nomination by the Committee must submit a recommendation in writing to the Secretary of the Company, at the Company's address appearing on page one, not later than 90 days in advance of the annual meeting at which the election is to be held. The recommendation should include the name and address of both the shareholder and the candidate and the qualifications of the candidate recommended.

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The Committee determines a process for identifying and evaluating nominees for director on a case by case basis, considering the context in which such nomination is being made. It is not anticipated that the process for evaluating a nominee would differ based on whether the nominee is recommended by a shareholder.

## BOARD RECOMMENDATION AND REQUIRED VOTE PROPOSAL NO. 1 ELECTION OF DIRECTORS

In the election of directors for terms expiring in 2022, the four candidates receiving the highest numbers of votes cast by the holders of Common Stock voting in person or by proxy will be elected as directors, subject to the resignation policy described above.

A proxy vote indicated as withheld from a nominee will not be cast for such nominee but will be counted in determining whether a quorum exists for the meeting. Shares for which neither a vote "for" or "withheld" is selected (e.g., broker non-votes) will not be counted in determining the total votes cast for this matter.

The Company's Restated Articles require that any shareholder intending to nominate a candidate for election as a director must give written notice, containing specified information, to the Secretary of the Company not later than 90 days in advance of the meeting at which the election is to be held. No such notices were received with respect to the 2019 Annual Meeting. Therefore, only the nominees named above will be eligible for election at the meeting.

The Board of Directors and its Nominating and Corporate Governance Committee recommend a vote FOR the election of the nominees, each of whom has consented to be named as a nominee and to serve if elected. Properly submitted proxies which are timely received will be voted for the election of the nominees named below, unless otherwise directed thereon, or for a substitute nominee designated by the Nominating and Corporate Governance Committee in the event a nominee named becomes unavailable for election.

## EXECUTIVE COMPENSATION

In this section, we will describe the material components of our executive compensation program for our "Named Executive Officers," referred to herein as "Named Officers," whose compensation is set forth in the 2019 Summary Compensation Table and other compensation tables contained in this proxy statement:

- Nishan J. Vartanian, President and Chief Executive Officer
- Kenneth D. Krause, Senior Vice President, Chief Financial Officer and Treasurer
- Steven C. Blanco, Vice President and President, MSA Americas
- Douglas K. McClaine, Senior Vice President, Secretary and Chief Legal Officer
- Bob W. Leenen, Vice President and President, MSA International
- William M. Lambert, former Chairman and Chief Executive Officer (Retired June 1, 2018)
- Kerry M. Bove, former Senior Vice President and Chief Strategy Officer (Retired July 1, 2018)

We will also provide an overview of our executive compensation philosophy and our executive compensation program. In addition, we explain how and why the Compensation Committee of the Board (the "Committee") arrives at specific compensation policies and decisions involving the Named Officers. These programs and processes are driven by the Committee's desire to continually increase shareholder value while assuring sound corporate governance, transparency and alignment with MSA's Vision and Values.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

## EXECUTIVE SUMMARY

## Our Business

Established in 1914, MSA Safety Incorporated is the global leader in the development, manufacture and supply of safety products that protect people and facility infrastructures. Recognized for their market leading innovation, many MSA products integrate a combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life-threatening situations. Our comprehensive product line, which is governed by rigorous safety standards across highly regulated industries, is used by workers around the world in a broad range of markets, including the oil, gas and petrochemical industry, fire service, construction, industrial manufacturing applications, utilities, mining and the military. Our core products include breathing apparatus where self-contained breathing apparatus ("SCBA") is the principal product, fixed gas and flame detection systems, portable gas detection instruments, industrial head protection products, firefighter helmets and protective apparel and fall protection devices.

The primary goal of the Company is to increase shareholder value over the long-term. We believe that this is best accomplished by achieving our vision "to be the world's leading provider of safety solutions that protect workers when life is on the line;" continually improving our financial performance; and maintaining a productive, diverse, and engaged workforce. The role of our management team is to develop and implement effective long-range strategic plans and annual operating plans to achieve these goals. Compensation programs and performance-based incentives are designed to target the median market compensation for executives when these plans are met, above median compensation when they are exceeded, and below median compensation when they are not met.

For 2018, reported revenues were $\$ 1.4$ billion, increasing 13\% from 2017. Revenue from the Company’s core product lines increased $15 \%$. Net income from continuing operations was $\$ 124$ million in 2018 as compared to $\$ 26$ million in 2017. The increase in GAAP earnings is partially attributable to certain charges which were required to be taken under GAAP and are described in detail in the Company's Form 10-K for 2018. The Company also disclosed in its 2018 earnings release, which is included in a Form 8-K dated February 20, 2019, an "adjusted earnings" calculation which shows an increase of 24\% in adjusted earnings for the Company in 2018 to $\$ 175$ million, as compared to adjusted earnings of $\$ 141$ million in 2017. The details of the GAAP earnings as compared to the adjusted earnings are set forth in the Form 8-K. Strong organic revenue growth, the acquisition of Globe Holding Company, a streamlined cost structure, and a lower effective tax rate were the key drivers of earnings growth in 2018. Cash flow from operating activities was $\$ 264$ million in 2018 compared to $\$ 230$ million in 2017, driven by a 220 basis point improvement from a year ago in working capital as a percent of sales. In 2018, the Company reduced its debt balance by $\$ 108$ million and returned $\$ 57$ million to shareholders through dividend payments.

## 2018 Executive Compensation Overview

The Committee has developed executive compensation programs comprised of three primary components: salary, performance-related annual incentives, and equity grants which are also largely performance related. In establishing the performance metrics for the 2018 annual incentive, the Committee recognized that MSA would have to continue navigating a challenging economic environment with significant cost reductions, investments in restructuring worldwide, and investments in select strategic initiatives and new product development. The 2018 business plan was designed to position the Company to grow and enter 2019 in a stronger cost competitive position for the years ahead.

The Company had several key areas of focus in 2018 including:

- Financial performance goals
- Regional business transformation goals
- Value creation initiatives focused on driving profitable growth
- Expanding and improving the "MSA Customer Experience"

The above areas of focus correlate with the Named Officers' performance metrics within the cash incentive plan and contribute to driving working capital, operating profits and consolidated net income. Demonstrating the strong correlation between the Company's performance incentive plans and actual results, our Named Officers earned cash incentive awards pursuant to our annual incentive program, ranging between $109 \%$ and $139 \%$ of target.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

To emphasize the importance of "pay-for-performance" in our compensation philosophy and our Company's culture, the Company's incentive arrangements are based on the achievement of specific performance goals that support our business strategy. Our annual incentive program focuses on achieving key performance metrics such as those mentioned above. Our long-term incentive program includes time-vesting restricted stock units and performance based stock units. Our performance stock unit program metrics are adjusted EBITDA margin percentage and revenue growth, modified by total shareholder return ("TSR") compared to our peer group. Time-vesting restricted stock units vest after three years of continued employment, providing the Company with a valuable retention incentive and alignment with shareholders' rewards for increases in stock price. Grants made in 2017 and 2018 have increased in value and remain unvested, thereby providing the Company with important retention benefits.

During 2018, the Committee reviewed the design and administration of all executive compensation programs to ensure that those programs continue to meet our performance requirements, deliver on our "Core Principles," and do not promote unnecessary risk-taking. The Committee also reviewed policies such as stock ownership requirements, and compensation recoupment. In addition, long-term incentive vesting provisions, capped incentive awards, and an emphasis on team-based metrics serve to mitigate risk. As a result, the Committee concluded that the Company's compensation programs effectively accomplish their intended goals, and do not promote unwanted risk taking that could be detrimental to the Company.

At the annual shareholders' meeting in May 2018, the executive compensation of the Company's Named Officers was approved by our shareholders, with $99.2 \%$ of the votes cast voting in favor of the proposal. The Committee considered this vote in connection with its determination of compensation policies and decisions and has concluded that the Company will maintain its existing compensation philosophy for 2019.

## Philosophy and Objectives of the Executive Compensation Program

The objectives of MSA's executive compensation programs, which cover not only the Named Officers in the Summary Compensation Table, but all key executives of the Company, are to improve shareholder value over the long-term by attracting, retaining and motivating superior executive talent who will drive robust financial and operational performance and enable the Company to achieve its goals. Our program is guided by a philosophy that strives to align target compensation at the middle ( $50^{\text {th }}$ percentile) of the market for total direct compensation. Elements of total compensation include salary, performancebased cash, equity incentives and benefits. Our program is designed to provide an above-market compensation opportunity for performance exceeding annual budget and peer group norms. We believe that this philosophy enables the Company to attract and retain superior executive talent by providing the opportunity to work in a highly ethical, growing and team-oriented Company.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The design of our compensation programs is driven by the following "Core Principles" which support our objectives:

| CORE PRINCIPLES | OBJECTIVE |
| :---: | :---: |
| - Executive compensation should be aligned to the achievement of corporate goals and objectives and provide line of sight to annual and long-term corporate strategies without promoting unacceptable levels of risk to the Company. | Improve shareholder value |
| - A significant portion of an executive's compensation should be "performance-based" and should hold executives accountable for the achievement of corporate objectives and increases in shareholder value. | Improve shareholder value |
| - The compensation program should promote an "ownership culture" through the use of stock-based compensation and ownership guidelines that clearly define expected levels of ownership in MSA's stock. | Improve shareholder value |
| - The compensation program should reward each executive's individual performance and unique responsibilities while assuring a fair and competitive approach. | Attract, retain and motivate superior talent |
| - The compensation program should recognize and reward an executive's loyalty and tenure with the Company by providing financial security following retirement. | Attract, retain and motivate superior talent |

## Components of Executive Compensation Program

Building on these core principles, our executive compensation program contains both cash and stock-based components designed to meet specific objectives of the Committee. The Committee considers both annual and long-term Company goals and strives to develop incentives that motivate executives to achieve these goals. Cash payments are provided through an executive's base salary and a performance-based annual incentive. Company stock is provided through the use of time-vesting restricted stock units and performance based stock units. The Committee has chosen to align its cash incentive programs with the achievement of annual internal financial and strategic goals, and its performance based stock units with long-term internal goals based on adjusted EBITDA margin percentage and revenue growth modified by TSR performance relative to our peer group.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

U.S. based executives participate in a retirement plan that provides for post-employment financial security, and some executives are provided with a limited number of perquisites (company car, financial counseling, executive physicals, and limited club memberships for business use) that the Committee believes serve a business purpose, are common in the market and are of modest cost to the Company. Executives also participate in a severance plan that provides certain benefits to executives should their jobs be terminated following a change in control of the Company. The specific rationale for why the Committee has chosen to provide each element of compensation is as follows:

| COMPENSATION <br> COMPONENT | KEY CHARACTERISTICS |
| :--- | :--- | :--- | :--- |

The Committee believes that these components, taken as a whole, provide an attractive compensation package that aligns with the Company's annual and long-term goals and enables the Company to attract, retain and motivate superior executive talent. As a means of mitigating risk, the Committee has adopted policies such as share ownership guidelines, which require executives to maintain a certain level of ownership of MSA stock, and a compensation recoupment policy that provides the Committee with the ability to recoup certain awards previously paid or earned based on financial results that were later restated downward, and discretionary authority held by the Committee that allows modification of any payouts from any plan, in the event of any other misconduct that causes financial harm to the Company.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Performance-Based Incentives. The Committee believes that a significant portion of a Named Officer's compensation should be delivered through performance-based incentive compensation components. The Committee has identified meaningful financial and shareholder performance objectives that align with the business, are measurable, and are used by management on a day-to-day basis to pursue its business strategy. The Committee has chosen the following measures for use in the Company's incentive arrangements that support and align with the Company's business strategy:

|  | ANNUAL CASH <br> INCENTIVE PLAN | LONG-TERM <br> INCENTIVE PLAN |  |
| :--- | :---: | :---: | :--- |
| PERFORMANCE MEASURE |  | X | X |

In summary, the Committee believes that the best way to reward executives is to combine a program of cash incentives (based on annual financial performance goals) with stock incentives (based on increases in the Company's stock price and, in part, on performance versus long-term financial performance metrics).

The Company's incentive plans (annual and long-term) are targeted to reward executives at the middle ( $50^{\text {th }}$ percentile) of the market for achieving expected or targeted performance levels. For example, our annual incentive plan is designed to pay above the targeted level and, therefore, above the middle of the market if the Company's performance exceeds our goals and expectations, up to a cap upon maximum performance. If the Company's performance falls below our goals and expectations, the annual incentive plan is designed to pay below the targeted level. If actual performance falls below certain threshold levels, our annual incentive plan is designed to pay nothing. This variable aspect of our annual incentive arrangement is also present in our long-term incentive plan. For instance, a significant portion of our long-term incentive plan consists of performance based stock units. At the date of grant, a target number of shares is established based on the share value at the time of the award and present dollar value of the compensation intended to be delivered. Ultimately the number of shares awarded at the end of the performance period varies based on the achievement of corporate goals. Our performance based restricted stock units also incorporate a performance threshold below which no payments are made. The 2017 and 2018 equity grants under the long-term incentive plan remain unvested, thereby providing the Company with important retention benefits.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The following table shows the allocation of performance-based versus fixed compensation components for our Named Officers at targeted levels as of the end of 2018:

## PERCENT OF COMPENSATION AT RISK

| Named Officer | Performance- <br> Based (1) | Fixed <br> (2) |
| :---: | :---: | :---: |
| Nishan J. Vartanian | 68.9\% | 31.1\% |
| Kenneth D. Krause | 57.5\% | 42.5\% |
| Steven C. Blanco | 57.6\% | 42.4\% |
| Douglas K. McClaine | 58.1\% | 41.9\% |
| Bob W. Leenen | 45.0\% | 55.0\% |
| William M. Lambert | 79.9\% | 20.1\% |
| Kerry M. Bove | 60.1\% | 39.9\% |

(1) Based on the target value of 2018 non-equity incentive award as of December 31, 2018, plus the target equity award allocation of equity instruments to performance units as of December 31, 2018.
(2) Based on annual base salary as of December 31, 2018 plus the target equity award as of December 31, 2018 and the allocation of equity instruments to time vested restricted units. Time vested restricted units are included in the "fixed" column because there are no performance conditions to vesting (other than continued employment), but unlike base salary, the ultimate value of stock issued upon the vesting of restricted stock units is inherently performance based.

## COMPENSATION OVERSIGHT PROCESS

Role of the Committee. The Committee has responsibility for the oversight and decision-making regarding executive compensation except for Chief Executive Officer ("CEO") compensation, which is recommended by the Committee but approved by the independent directors as described below. The Committee has engaged an outside compensation consultant, Pay Governance, LLC to provide assistance and guidance on executive compensation matters. The consultant provides management and the Committee with relevant information pertaining to market compensation levels, alternative compensation plan designs, market trends and best practices. Pay Governance is considered to be independent by the Committee. During 2018 the consultant provided only executive compensation consulting services to the Committee and also provided non-employee director compensation services to the Nominating and Corporate Governance Committee. Further, the Committee has not discovered any conflicts of interest that were raised by the work of the consultant involved in determining or recommending executive compensation.

At its meetings, the Committee regularly holds executive sessions, which exclude management and, subject to the Committee's desire, may include its independent consultant. Management assists in the coordination and preparation of the meeting agenda and materials for each meeting, which are reviewed and approved by the Committee Chair. Meeting briefing materials are mailed to Committee members for review approximately one week in advance of each meeting. The Committee met six times in 2018 and held an executive session at four of the six meetings, which excluded members of management.

For the CEO's compensation, the Committee develops proposals and presents them to the independent directors of the Board for their approval. Compensation decisions regarding all other executives are approved by the Committee, which takes into consideration the recommendations of the CEO.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Role of the Compensation Consultant. The Committee has retained Pay Governance, LLC as its executive compensation consultant. The compensation consultant reports directly to the Committee and the Committee may replace the compensation consultant or hire additional consultants at any time. The compensation consultant attends meetings of the Committee, as requested, and communicates with the Committee Chair between meetings.

The compensation consultant provides various executive compensation services to the Committee pursuant to a written consulting agreement approved by the Committee Chair. Generally, these services include advising the Committee on the principal aspects of our executive compensation program and evolving industry practices, and providing market information and analysis regarding the competitiveness of our program design and our award values in relationship to performance.

During 2018, the compensation consultant performed the following specific services for the Committee:

- Provided presentations on executive compensation trends and external developments.
- Provided an annual competitive evaluation of total compensation for the Named Officers, as well as our overall compensation program.
- Provided recommendations on the total compensation for all executives.
- Provided recommendations on the total compensation for the new CEO.
- Reviewed Committee agendas and supporting materials in advance of each meeting, and raised questions/issues with management and the Committee Chair, as appropriate.
- Reviewed drafts and commented on the compensation discussion and analysis for the proxy statement and the related compensation tables.

In addition, the compensation consultant attended meetings of the Committee during 2018 as requested by the Committee Chair.
The Committee retains sole authority to hire the compensation consultant, approve its annual fees, determine the nature and scope of its services, evaluate its performance, approve all invoices for payment of services and terminate its engagement.

Use of Competitive Data. The Committee reviews data related to compensation levels and programs of other companies prior to making its decisions. The Committee engages its consultant to perform a comprehensive assessment of compensation levels provided to executives among a peer group of companies. These companies are selected based on the following criteria:

- Annual revenues that range from approximately half to double our annual revenues (approximately $\$ 700$ million to $\$ 2.8$ billion in 2018)
- Manufacturing processes similar to various MSA industry sectors and technologies
- Global operations and customer base

For 2018, the peer group consisted of the following 20 companies:

| Actuant Corporation | Graco Inc. | Nordson Corporation |
| :--- | :--- | :--- |
| Albany International Corp. | IDEX Corporation | PerkinElmer Inc. |
| Brady Corporation | Invacare Corporation | Simpson Manufacturing Company Inc. |
| ESCO Technologies Inc. | Littelfuse, Inc. | Standex International Corporation |
| Federal Signal Corporation | Matthews International Corporation | STERIS plc |
| FLIR Systems, Inc. | Masimo Corporation | Waters Corporation |
| Gentex Corporation | MKS Instruments, Inc. |  |

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The Committee reassesses the peer group composition annually and may periodically make changes, usually by adding companies that may better meet our selection criteria or by removing companies that may have experienced change, such as acquisition, or no longer fit our selection criteria. In 2018, the Committee, through its consultant, conducted a review of the peer companies which resulted in the conclusion that, for 2019, the peer group set forth above was well aligned and should not be changed.

The consultant conducts an annual analysis of the most recent proxy disclosures for the peer group companies in order to understand the compensation ranges for base salary, and the annual and long-term incentives provided to the peer group named executive officers. In addition, regression analysis is applied to data from compensation surveys conducted by Willis Towers Watson representing nearly 1,000 general industry companies. The Committee believes that the combination of these comprehensive data sources allows it to understand the market compensation ranges for both the Named Officers and positions below the Named Officers based on the duties and responsibilities of each position and to determine the level of compensation needed to target the middle ( $50^{\text {th }}$ percentile) of the market.

The market compensation data is further used to develop a market compensation structure which includes salary grades with midpoints. Each executive is assigned to a salary grade where the midpoint of the grade approximates the median ( $50^{\text {th }}$ percentile) of the market salary level for that position. Each salary grade has a salary range around the midpoint and has corresponding annual and long-term incentive award opportunities that are percentages of the midpoint, and which also align to market based values. In assigning an executive to a salary grade, the Committee also considers internal factors that may, in a limited number of instances, impact the grade assignment of an executive.

In addition to the market data, the Committee considers the following factors when making compensation decisions:

- Individual and Company performance
- Experience in the position
- Current compensation relative to market median

An assessment of these factors could result in actual compensation being positioned modestly above or below the desired middle ( $50^{\text {th }}$ percentile) of the market positioning. The Committee does not consider amounts earned from prior performance-based compensation, such as prior bonus awards or realized or unrealized stock award gains, in its decisions to increase or decrease compensation for the following year. The Committee believes that this would not be in the best interest of retaining and motivating its executives.

In order to assess the impact of its executive compensation decisions, the Committee reviews a summary report - or "tally sheet" - of total compensation prepared for the CEO. The tally sheet includes the total dollar value of annual compensation, including salary, annual and long-term incentive awards, annual increase in retirement accruals and the value of other benefits and perquisites. The tally sheet also provides the Committee information pertaining to equity ownership, future retirement benefits, and benefits the Company is required to provide to the CEO under various termination scenarios. The Committee's review of the tally sheet information is an integral part of its decision making process each year.

## DETERMINATION OF EXECUTIVE COMPENSATION AMOUNTS

Fixed Cash Base Salary. The Company provides executives with a base salary in order to attract and retain executive talent. Base salary is designed to be competitive with other organizations and is sensitive to the skill level, responsibility and experience of the executive. Base salary for each executive is determined through our external benchmarking process and an internal comparison to other executives at the Company to ensure internal equity. Base salary levels are targeted to the middle ( $50^{\text {th }}$ percentile) of the market, although the Committee considers base salary levels that fall within plus or minus $10 \%$ of the market median to be competitive.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Base salary adjustments are considered and are affected by each executive's individual performance assessment based on a rigorous performance review process. This individual process details an executive's annual accomplishments compared to performance expectations established at the outset of each year, and also assesses the individual's behaviors used to achieve the performance level. The CEO develops and recommends to the Committee annual base salary adjustments for each executive primarily by evaluating the value and impact that each executive has had on the Company's performance during the year.

The Committee performs a similar comprehensive evaluation of the CEO's performance against predetermined annual operational and strategic goals previously approved by the independent directors of the Board, and determines a recommended annual base salary increase based on the outcome of this evaluation. This salary recommendation is then also approved by the independent directors of the Board. At its February 2018 meeting, the Committee approved salary increases ranging from $0 \%$ to $10.1 \%$ for the Named Officers. Following these adjustments, salary levels were positioned as follows relative to the market median targeted level: Mr. Vartanian, $4 \%$ above median; Mr. Krause, at median; Mr. Blanco $5.0 \%$ below median; Mr. McClaine $5.4 \%$ above median; Mr. Leenen $16.7 \%$ below median; Mr. Lambert, $5.6 \%$ above median; and Mr. Bove $1.6 \%$ above median. Mr. Vartanian was promoted to the role of President and Chief Executive Officer on June 1, 2018 and in connection with the promotion he had an additional salary adjustment in June 2018. As a result, Mr. Vartanian is $6.1 \%$ below market median for the CEO position.

Performance-Based Annual Cash Incentive. The Company provides executives with an annual cash incentive based on (a) the MSA Non-CEO Executive Incentive Plan (NCEIP), which directly rewards the accomplishment of key corporate and/or geographical or business unit performance goals, and (b) the CEO Annual Incentive Award Plan (AIAP) which has been approved by shareholders. Additionally, each executive, including the CEO, is eligible for a program known as the "Enhanced Bonus" that rewards participants only when the Company's actual consolidated net income exceeds pre-set boardapproved targets. Under the Enhanced Bonus feature, annual incentive awards earned under the NCEIP or AIAP, which are each limited to a maximum payout of $150 \%$ of target, may be increased from $0 \%$ to $50 \%$ if the Company's consolidated net income exceeds the target. The enhancement is interpolated at performance levels between target and $125 \%$ of target. For each $1 \%$ increase in actual consolidated net income above target, earned awards under the NCEIP and AIAP are increased by $2 \%$. For example, at performance of $105 \%$ of net income target, the incentive is increased by $10 \%$. The incentive is increased by $50 \%$ if the Company exceeds the net income target by $25 \%$ or more, resulting in a total bonus opportunity which is capped at $200 \%$ of target should performance achieve or exceed maximum levels. The Committee believes that the increased performance leverage that the Enhanced Bonus is designed to provide is in the best interests of our shareholders by motivating our senior management to exceed bottom line profitability targets in addition to important Company and business unit performance metrics.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The following chart illustrates how the enhanced bonus feature rewards performance that exceeds targets under the NCEIP and AIAP, thereby assuring that executive reward is aligned to shareholder value. The "Example of Highly Leveraged Plan" in the chart is based upon Pay Governance, LLC research. The Committee limits the total possible payout to $200 \%$ of the target for 2019.


Under the NCEIP and AIAP, the target incentive opportunity (paid for achieving target performance) for each Named Officer is aligned with the executive's salary grade midpoint which approximates the middle ( $50^{\text {th }}$ percentile) of the market as determined through our external benchmarking process, although the Committee generally considers target incentive opportunities between plus or minus 10 percentage points of the market median to be competitive. If actual performance drops below a predefined performance threshold, payout drops to zero.

The following table shows the target bonus percent and dollar amount of incentive that would be earned if actual performance for 2018 was equal to targeted performance.

## 2018 TARGET CASH INCENTIVE AWARD

|  | Percent of <br> Salary Midpoint <br> $(1)$ | NCEIP/AIAP <br> Target Award |  |
| :--- | ---: | ---: | ---: | ---: |
| Named Officer | $100 \%$ | $\$$ | 765,000 |
| Nishan J. Vartanian | $65 \%$ | $\$$ | 275,600 |
| Kenneth D. Krause | $65 \%$ | $\$$ | 250,673 |
| Steven C. Blanco | $50 \%$ | $\$$ | 192,825 |
| Douglas K. McClaine | $60 \%$ | $\$$ | 228,575 |
| Bob W. Leenen(3) | $100 \%$ | $\$$ | 826,200 |
| William M. Lambert | $50 \%$ | $\$$ | 192,825 |

(1) Reflects the percentage of the U.S. based executives' salary grade midpoints (see note 3 below) using the target award as of December 31, 2018. The target awards shown above reflect 2018 midpoints as of December 31, 2018.
(2) Target award is the amount that would be paid to the executive assuming all Company and individual performance goals are met per that executive's performance metrics based upon targets and midpoints as of December 31, 2018.
(3) Reflects the percentage of the non-U.S. based executive Mr. Leenen's salary using the target award as of December 31, 2018. The target award shown above reflects Mr. Leenen's salary as of December 31, 2018.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Actual NCEIP award payments are based primarily on the achievement of a variety of Company financial and non-financial goals, but also have a discretionary personal performance factor applied based on the value and impact that each executive has had on the Company's performance during the year. When making recommendations for the 2018 discretionary personal performance factor, the CEO may increase or decrease the calculated NCEIP annual cash incentive amount by up to $20 \%$ in $10 \%$ increments.

Actual AIAP award payments for the CEO for 2018 were based $30 \%$ on achievement of consolidated net sales, $15 \%$ on consolidated net income, as approved by the Committee at the beginning of $2018,15 \%$ on achievement of consolidated operating margin percentage, $20 \%$ on achievement of consolidated CSPI (Customer Satisfaction Performance Index), and $20 \%$ on achievement of consolidated working capital as a percentage of sales, all relative to the predetermined goals established and approved by the Committee. The Committee also recommends for Board approval annual operational and strategic goals for the CEO. The independent directors of the Committee may use their discretion to reduce the size of the CEO's calculated award based on his performance relative to his individual goals, but may not increase it.

If performance is below the minimum threshold level, the payout goes to zero. In addition to these opportunities, the Enhanced Bonus feature may add up to $50 \%$ to the calculated NCEIP or AIAP award depending on the level of consolidated net income performance above target. The maximum award opportunity under all plans combined is $200 \%$ of target for each executive including the CEO. Actual awards paid for 2018 performance are included in the Summary Compensation Table on page 39 under the column Non-Equity Incentive Plan Compensation. Award opportunities for each Named Officer under the combined plans for 2018 at threshold, target and maximum are included in the Grants of Plan-Based Awards table on page 40 under the columns Estimated Possible Payouts Under Non-Equity Incentive Plan Awards.

In 2018, performance measures and goals were approved by the Committee at its February meeting. For the CEO and the other Named Officers, the Committee and, in the case of the CEO, independent directors of the Board, approved the following performance targets:

## PERFORMANCE TARGETS FOR ANNUAL CASH INCENTIVE

President and Chief Operating Officer - Nishan J. Vartanian (Effective January - May 2018)
(Dollars in millions)

|  |  |  | Pre-Es | lished 20 entive C | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Performance Measure | Weighting | 2018 Actual Performance | Threshold | Target | Maximum |
| Consolidated Net Sales | 30.00\% | \$1,340 | \$1,172 | \$1,302 | \$1,432 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Consolidated Operating Margin \% | 15.00\% | 17.19\% | 13.62\% | 17.02\% | 20.42\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)
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President and Chief Executive Officer - Nishan J. Vartanian (Effective June - December 2018)
(Dollars in millions)

| Performance Measure | Weighting | 2018 Actual <br> Performance | Pre-Established 2018 Annual Incentive Goals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Threshold | Target | Maximum |
| Consolidated Net Sales | 30.00\% | \$1,340 | \$1,172 | \$1,302 | \$1,432 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Consolidated Operating Margin \% | 15.00\% | 17.19\% | 13.62\% | 17.02\% | 20.42\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above and including current and prior role, $115 \%$ of target incentive was earned for 2018 .
Senior Vice President, Chief Financial Officer and Treasurer - Kenneth D. Krause
(Dollars in millions)

|  |  |  | Pre-Es | lished 20 entive C | Annual s |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Performance Measure | Weighting | 2018 Actual <br> Performance | Threshold | Target | Maximum |
| Consolidated Net Sales | 30.00\% | \$1,340 | \$1,172 | \$1,302 | \$1,432 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Consolidated Operating Margin \% | 15.00\% | 17.19\% | 13.62\% | 17.02\% | 20.42\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above, and a $20 \%$ personal performance factor, $138 \%$ of target incentive was earned for 2018.

## Vice President and President MSA Americas - Steven C. Blanco

(Dollars in millions)

| Performance Measure | Weighting | 2018 Actual <br> Performance | Pre-Established 2018 Annual Incentive Goals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Threshold | Target | Maximum |
| Americas Net Sales ${ }^{2}$ | 30.00\% | \$856 | \$625 | \$694 | \$763 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Americas Operating Margin $\%^{2}$ | 15.00\% | 29.60\% | 24.08\% | 30.10\% | 36.12\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above, and a $10 \%$ personal performance factor, $126 \%$ of target incentive was earned for 2018.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Senior Vice President, Secretary and Chief Legal Officer - Douglas K. McClaine
(Dollars in millions)

| Performance Measure | Weighting | 2018 Actual <br> Performance | Pre-Established 2018 Annual Incentive Goals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Threshold | Target | Maximum |
| Consolidated Net Sales | 30.00\% | \$1,340 | \$1,172 | \$1,302 | \$1,432 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Consolidated Operating Margin \% | 15.00\% | 17.19\% | 13.62\% | 17.02\% | 20.42\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above, and a $10 \%$ personal performance factor, $127 \%$ of target incentive was earned for 2018.

## Vice President and President MSA International - Bob W. Leenen

(Dollars in millions)

| International Net Sales ${ }^{2}$ Performance Measure | Weighting | 2018 Actual <br> Performance | Pre-Established 2018 Annual Incentive Goals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Threshold | Target | Maximum |
|  | 30.00\% | \$484 | \$425 | \$472 | \$519 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| International Operating Margin $\%^{2}$ | 15.00\% | 17.54\% | 13.84\% | 17.30\% | 20.76\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above, and a $10 \%$ personal performance factor, $126 \%$ of target incentive was earned for 2018.

Chairman and Former Chief Executive Officer - William M. Lambert
(Dollars in millions)

| Performance Measure | Weighting | 2018 Actual <br> Performance | Pre-Established 2018 Annual Incentive Goals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Threshold | Target | Maximum |
| Consolidated Net Sales | 30.00\% | \$1,340 | \$1,172 | \$1,302 | \$1,432 |
| Consolidated Net Income ${ }^{1}$ | 15.00\% | \$143 | \$110 | \$138 | \$164 |
| Consolidated Operating Margin \% | 15.00\% | 17.19\% | 13.62\% | 17.02\% | 20.42\% |
| Consolidated Working Capital as a \% of Sales | 20.00\% | 24.19\% | 28.50\% | 23.75\% | 19.00\% |
| Consolidated CSPI | 20.00\% | 67.1 | 59.9 | 66.5 | 73.2 |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above and retirement as of June 1, 2018, $48 \%$ of target incentive was earned for 2018 .

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Former Senior Vice President and Chief Strategy Officer - Kerry M. Bove
(Dollars in millions)

|  |  |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

Note: As a result of 2018 performance, along with the achievement of the Enhanced Bonus described on page 25 above, and retirement as of July 1, 2018, $57 \%$ of target incentive was earned for 2018 .
${ }^{1}$ Consolidated Net Income from continuing operations of $\$ 125$ million plus $\$ 33$ million in costs related to self-insured product liability expense, costs associated with corporate restructuring and tax savings initiatives added back to Consolidated Net Income, and reduced by $\$ 13$ million for unplanned benefits related to tax reform and a favorable LIFO reserve adjustment recorded at year-end.
${ }^{2}$ For geographic business metrics and certain consolidated metrics, currency-adjusted actual results will be used to compute the annual incentive payment.
The Committee chose consolidated net sales as the most significant corporate performance goal for 2018 for all Named Officers. All Named Officers are also measured by other performance goals appropriate to their job duties. The Committee believes that these measures are the best indicators of performance produced as a result of our executives' efforts and is reflective of their individual areas of responsibility.

Long-Term Incentive Compensation. Our long-term incentive program represents a significant portion of an executive's total compensation package. Awards under this program are considered "at risk," which means they can increase or decrease in value based on fluctuations in our stock price. In selecting the appropriate long-term incentive vehicles, the Committee made its decisions based on its desire to reward for long-term stock price appreciation, to promote loyalty and tenure with the Company and to increase executives' alignment with shareholders. Time-vesting restricted stock units and performance based stock units were chosen to meet these attributes. These awards are granted under the shareholder-approved Amended and Restated 2016 Management Equity Incentive Plan. In 2018 the mix was $100 \%$ performance stock units for officers who have reached retirement eligibility and had achieved their ownership guidelines. This particular mix of awards positions these retirement-eligible officers' to have more equity "at risk" and provides better alignment to performance. For officers who have achieved their ownership guideline but who have not yet reached retirement eligibility, and for officers who have reached retirement eligibility but have not yet reached their ownership guideline, the mix is $80 \%$ performance stock units and $20 \%$ time-vesting restricted stock units. For other officers, the mix is two-thirds performance stock units and one-third time-vesting restricted stock units, recognizing the need to have a greater portion of equity compensation delivered in restricted stock units.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The following table illustrates the calculation and allocation of the long-term incentive compensation. This table and the table of Grants of Plan-Based Awards use the amounts computed in accordance with FASB ASC Topic 718.

## LONG-TERM INCENTIVE COMPENSATION


${ }^{1}$ Reflects salary midpoint for U.S. based Named Officers (see note 6 below) at the time of the award in February 2018.
${ }^{2}$ Stock multiplier is the plan percentage effective in February 2018. Columns 3 and 4 percentages reflect the split of the stock multiplier into restricted stock units and performance stock units in accordance with the discussion above.

4 Actual Performance Stock Units awarded = Performance Stock Units Award Value divided by the closing stock price on the date of the award. Actual amount may vary due to rounding to nearest share value. Amounts shown in this column may differ from amounts shown in the compensation tables contained in this proxy statement due to differences in the method of calculating fair market value in compensation tables in accordance with FASB ASC Topic 718.
${ }^{5}$ The 2018 grant made to Mr. Vartanian was made prior to his appointment to CEO and was based on the targets for the position that he held at the time of grant.
${ }^{6}$ Reflects actual salary converted to USD for Mr. Leenen, who is a non-U.S. based Named Officer.
${ }^{7}$ In connection with Mr. Lambert's anticipated June 1, 2018 retirement, in February 2018 the Compensation Committee prorated his 2018 annual equity award for the portion of the year worked and granted the award as Restricted Stock Units.
${ }^{8}$ In connection with Mr. Bove's anticipated July 1, 2018 retirement, in February 2018 the Compensation Committee prorated his 2018 annual equity award for the portion of the year worked and granted the award as Restricted Stock Units.

NOTE: A stock multiplier is the percentage of the U.S. based Named Officer's salary midpoint, or the non-U.S. based Named Officer's actual salary, that is awarded in annual equity grants as long term incentives. Stock multipliers are market based and determined with the assistance of the Committee's outside compensation consultant.

Long-term incentive opportunities are developed for each executive salary grade based on the middle ( $50^{\text {th }}$ percentile) of the market. While the Committee reviews these long-term incentive opportunities annually, it typically only adjusts the individual opportunities periodically as market median long-term incentive data tends to be volatile, increasing or decreasing for certain positions more frequently than salary or annual incentive data.

Performance Stock Units. The Company uses this type of equity grant to incentivize the achievement of one or more specific goals promoting long-term shareholder value. At the date of grant, a target number of shares is established based on the share value at the time of the award and present dollar value of the compensation intended to be delivered. Ultimately the number of shares awarded at the end of the performance period varies based on the achievement of corporate goals.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The target number of shares will vest if the target performance goals are met. If "excellence" goals are met, the number of shares vested will be doubled. If only the minimum "threshold" performance is achieved, one half of the target number of shares will vest. If performance is below "threshold," the entire award will be forfeited. At performance levels between threshold, target and excellence, awards will be interpolated. There are no shares issued until the performance goals have been met. Therefore, there are no dividend rights or voting rights associated with this form of long-term incentive until the shares are actually issued upon performance goals being met.

For 2016 grants, the long-term performance stock unit incentive award included two internal financial metrics to measure performance, with the final results modified based on TSR as compared to a peer group. The internal financial metrics were based on Operating Margin percentage (weighted at $60 \%$ ) and Revenue Growth (weighted at 40\%). The use of the TSR modifier is intended to align officer and other key executives' rewards with changing shareholder value. Operating Margin percentage and Revenue Growth will be adjusted based on pre-determined items. There will be no interim shares earned. The performance for the entire grant was determined at the end of the performance period on December 31, 2018. The same design was used for the 2017 performance stock unit incentive awards and the performance for that entire grant will be determined at the end of the performance period on December 31, 2019.

For 2018 grants the long-term performance stock unit incentive award included two internal financial metrics to measure performance, with the final results modified based on TSR as compared to a peer group. The internal financial metrics were based on Adjusted EBITDA Margin percentage (weighted at 50\%) and Revenue Growth (weighted at $50 \%$ ). The use of the TSR modifier is intended to align officer and other key executives' rewards with changing shareholder value. Adjusted EBITDA Margin percentage and Revenue Growth will be adjusted based on pre-determined items. There will be no interim shares earned. The performance for the entire grant will be determined at the end of the performance period on December 31, 2020.

At target performance, $100 \%$ of the target number of shares will be awarded. At threshold performance, $50 \%$ of the target number of shares will be awarded. At the excellence level of performance, $200 \%$ of the target number of shares will be awarded. Results between threshold and target, and between target and excellence, will be interpolated. Any amount of shares which are determined to be awarded will be further adjusted by the TSR modifier described below.

If MSA's percentile ranking for TSR versus our peer group is at the $40^{\text {th }}$ percentile to the $60^{\text {th }}$ percentile, the TSR modifier will be 1.0 . The TSR modifier for a ranking greater than the $60^{\text {th }}$ percentile but less than the $75^{\text {th }}$ percentile will be 1.10 . The TSR modifier for a ranking greater at the $75^{\text {th }}$ percentile or above will be 1.20 . The TSR modifier for a ranking greater than the $25^{\text {th }}$ percentile but less than the $40^{\text {th }}$ percentile will be 0.90 . The TSR modifier for a ranking greater at the $25^{\text {th }}$ percentile or below will be 0.80 .

At the end of the three year period, the 2016 grant performed at the excellence level against the Operating Margin percentage goal and above target level against the Revenue Growth goal and had relative TSR performance at the $98^{\text {th }}$ percentile, resulting in a multiplier of $20 \%$, which resulted in a total payout of $237.6 \%$ of target.

The shares related to the 2017 and 2018 annual performance stock unit grants will vest on March 8, 2020 and March 8, 2021, respectively, and are subject to determination by the Compensation Committee of the actual performance achieved.

Time-Vesting Restricted Stock Units. The Committee selected time-vesting restricted stock units in order to create and encourage an ownership culture and to serve as a retention tool. Restricted stock units vest $100 \%$ on or about the third anniversary following the date of grant. The value assigned to restricted stock units is the fair market value of the shares of Common Stock to which such restricted stock units relate on the date of grant, and the recipient is charged with income for Federal income tax purposes in the year of vesting at the market value as of the date that the restrictions lapse. The restricted units do not include voting rights or the right to dividends or dividend equivalents during the vesting period.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

## ADDITIONAL CONSIDERATIONS RELATING TO THE CEO

In 2018, Mr. Lambert's base pay was adjusted by amounts which conform to the Company's merit increase guidelines for U.S. payroll. The increase for 2018 in Mr. Lambert's salary was 3.0\%.

Upon Mr. Lambert's retirement and Mr. Vartanian's promotion to the role of CEO, Mr. Vartanian received a 47.1\% increase bringing his salary to $93.9 \%$ of the market median for the CEO position.

CEO Pay For Performance. During 2018, the Committee, with the assistance of its compensation consultant Pay Governance, conducted several analyses to assess the alignment of the CEO's pay relative to the performance of the Company. Company performance was defined as either our TSR or a composite of performance metrics. This composite consists of the average ranking relative to our peers of our TSR, Net Income Growth, RONA and Operating Income Margin. These analyses considered the CEO's total direct compensation (TDC) which includes: base salary, actual cash bonus earned and value of equity incentives. Equity incentives were considered using two separate methodologies:

1. Expected value method: this method considered the grant date fair value of equity awards and is the same value as stated in our proxy statement summary compensation table.
2. Realizable compensation method: this method examines the aggregate value of previously granted equity awards at a point in time, including: a. the in-the-money intrinsic value of stock option grants made during the period,
b. the end of period value of restricted stock grants made during the period, and
c. for performance awards, the actual payouts for awards beginning and ending during the three-year performance period and the end of period estimated payout for unvested awards granted during the three-year performance period ended December 31, 2017.

During 2018, the Committee reviewed and discussed the results of the following independent analyses and was satisfied that the executive compensation program was aligned with the performance of the Company.

## 2017 CEO Actual Annual Cash Incentive Earned Relative to Peers versus 2017 Composite Performance Relative to Peers

This analysis compares our CEO's 2017 actual bonus earned (and paid in early 2018) to the composite performance metrics, which are a collection of metrics used in our incentive arrangements. Both the CEO's bonus information and the composite performance results were compared to the same data of our peers and considered on a percentile rank basis. The Committee concluded that the CEO's annual incentive payment, when evaluated in terms of absolute dollar value, was reasonably aligned with the relative performance of the Company.

|  | BONUS RELATIVE | PERFORMANCE | ALIGNMENT OF <br> RELATIVE TO |
| :--- | :---: | :---: | :---: |
| BONUS AND |  |  |  |

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Pay-for-Performance Alignment


2017 CEO Realizable Compensation Relative to Peers versus 2017 Composite Performance Relative to Peers
This analysis compares our CEO's realizable compensation (realizable compensation method, described above) over the three-year period 2015 through 2017 relative to the composite performance metrics, which are a collection of metrics used in our incentive arrangements. Both the CEO's realizable compensation information and the composite performance results were compared to the same data of our peers and considered on a percentile rank basis. The Committee concluded that the CEO's three-year realizable compensation, when evaluated in terms of absolute dollar value, was reasonably aligned with the relative performance of the Company.

|  | REALIZABLE COMPENSATION RELATIVE TO PEERS | PERFORMANCE RELATIVE TO PEERS | ALIGNMENT OF REALIZABLE COMPENSATION AND PERFORMANCE |
| :---: | :---: | :---: | :---: |
| CEO Realizable Compensation (Value) | $32^{\text {nd }}$ Percentile | 39th Percentile | Reasonable |

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Pay-for-Performance Alignment


CEO Realizable Compensation as a Percent of Expected Value Relative to Company TSR Performance
This analysis examines the percent difference in compensation granted to our CEO in a particular year expressed on an expected value basis (note 1 below) versus the same compensation expressed on a realizable value basis (note 2 below) at the end of 2018. This percent difference is compared to the change in actual Company TSR for the same time periods to understand if the difference in expected value pay and realizable pay is directionally similar to our TSR performance. For example, if our stock price falls over a period of time we would expect our CEO's realizable compensation to be less than the expected value at the time the compensation was granted. In evaluating this analysis, the Committee was satisfied that the CEO's realizable compensation was directionally similar to changes in our TSR.

| Year | MSA CEO Target TDC at Grant (1) | $\begin{gathered} \text { MSA CEO } \\ \text { Realizable Value (2) } \end{gathered}$ |  | Measurement Period | Change in Pay Value (3) | Change in MSA TSR (4) | Alignment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 | \$ 3,507,177 | \$ | 10,711,332 | 2016-2018 | 205\% | 131\% | Reasonable |
| 2017 | \$ 4,192,457 | \$ | 4,825,242 | 2017-2018 | 15\% | 41\% | Reasonable |
| 2018 | \$ 2,504,543 | \$ | 2,603,040 | 2018 | 4\% | 24\% | Reasonable |
| Total | \$ 10,204,177 | \$ | 18,139,614 | 2016-2018 | 78\% | 131\% | Reasonable |

(1) Target TDC at Grant includes for each particular year the CEO's base salary, target bonus and the grant date fair value of equity awards granted.
(2) Realizable value includes for each particular year the CEO's base salary, actual bonus earned and the realizable value of equity awards granted during that particular year using our December 31, 2018 closing stock price. See page 32 for a more detailed description of realizable value for long-term incentive awards.
(3) Change in Pay Value is the change in the CEO's compensation from the time it was granted to December 31, 2018 considering the impact of actual performance relative to performance goals and changes in Company stock price.
(4) MSA TSR is calculated on a point-to-point basis using the final trading day of each year.

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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

## OTHER COMPENSATION AND RETIREMENT POLICIES

In addition to the other components of our executive compensation program, we maintain the compensation policies described below. These policies are consistent with evolving best practices and help ensure that our executive compensation program does not encourage our officers to engage in risk taking beyond our ability to effectively identify and manage.
U.S. Post-Employment Retirement Benefits. Retirement related compensation is designed to provide financial security following retirement from the Company and to reward for loyalty and tenure. Retirement benefits for U.S. based Named Officers fall into three major elements which include pension, 401(k) and non-qualified retirement plans. All of these programs exist to help attract, retain, and motivate key executives. The programs listed below are designed to be competitive and are compared periodically to representative peer companies. Plan design and provisions are reviewed periodically to determine if the total retirement package is competitive. Retirement-related compensation programs do not have a direct linkage to performance but rather a link to a long term commitment to MSA, as do all other welfare benefits.

- Pension - offered as part of a retirement package that helps the Company recruit employees and provides security and peace of mind for future retirement, enabling executives and other employees to exit the workforce at retirement age. Pension amounts are based on final average pay, years of service, age, and a pre-determined plan formula.
- $\quad 401(\mathrm{k})$ - offered as part of our benefits package to encourage employees to save for their own retirement and future financial security. MSA matches $100 \%$ of the first $1 \%$ of employee contributions and $50 \%$ of the next $6 \%$ for a total match of $4 \%$ on $7 \%$ of compensation.
- Non-qualified retirement plans - provide additional retirement benefits for executives whose accumulations and contributions in the qualified plans are limited by the Internal Revenue Code. MSA maintains three such plans. The MSA 2005 Supplemental Retirement Savings Plan provides benefits beyond the limitations imposed on $401(\mathrm{k})$ plans. The MSA Supplemental Pension Plan provides benefits beyond the limitations imposed on defined benefit pension plans. The Company ceased providing benefits under the Supplemental Pension Plan for any employees who are newly hired or promoted into the eligible class of key executives after December 31, 2012. The MSA Supplemental Executive Retirement Plan provides additional retirement benefits only for officers who retire from the Company at age 55 or later. The Company ceased providing benefits under the MSA Supplemental Executive Retirement Plan to any new executives who joined the Company after January 1, 2008.


## Non-U.S. Post-Employment Retirement Benefits:

- Pension - offered as a retirement benefit with a lump sum withdrawal option that provides security and peace of mind for future retirement, enabling executives and other employees to exit the workforce at retirement age. Pension amounts are based on employee contributions, employer contributions, years of service, age, and a pre-determined plan formula.

Stock Ownership Guideline Policy. During 2018, the Committee modified the Stock Ownership Guideline and Retention Policy. The policy was updated to adjust the calculation of ownership requirements to be a multiple of actual salary rather than salary grade midpoint. All Named Officers are expected to hold a number of shares equal in value to their actual salary as of year-end, multiplied by a stock multiplier ranging from 2.25 up to 5.5 for the CEO. Prior to achieving the stock ownership guidelines mentioned above, the executive must retain $100 \%$ of all equity awards through the Company's compensation program (net of exercise costs and taxes). The specified ownership amount is expected to be retained thereafter as long as a Named Officer remains an active employee. The Company also maintains similar stock ownership guidelines for other key executives, including appropriate multipliers.

Messrs. Krause, Blanco and McClaine exceeded their stock ownership guideline requirements as of December 31, 2018. Messrs. Vartanian and Leenen have not yet met their stock ownership guideline requirements as of December 31, 2018, due to their limited tenure in their respective roles.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

The stock ownership requirements for each Named Officer are as follows:
STOCK OWNERSHIP REQUIREMENTS

|  | Salary |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Title |  | as <br> /31/2018 | 2018 Stock Multiplier |  | Ownership Requirement |  |  |
| Nishan J. Vartanian | President and Chief Executive Officer | \$ | 765,000 | x | 5.50 | = | \$ | 4,207,500 |
| Kenneth D. Krause | Senior Vice President, Chief Financial Officer and Treasurer | \$ | 435,000 | x | 3.50 | = | \$ | 1,522,500 |
| Steven C. Blanco | Vice President and President MSA Americas | \$ | 380,000 | x | 2.25 | = | \$ | 855,000 |
| Douglas K. McClaine | Senior Vice President, Secretary and Chief Legal Officer | \$ | 390,000 | x | 2.25 | = | \$ | 877,500 |
| Bob W. Leenen | Vice President and President MSA International | \$ | 380,959 | x | 2.25 | = | \$ | 857,158 |
| William M. Lambert (1) | Chairman and Former Chief Executive Officer |  | - | x | 5.50 |  | \$ | N/A |
| Kerry M. Bove (2) | Former Senior Vice President and Chief Strategy Officer |  | - | x | 2.25 | = | \$ | N/A |

1 Mr. Lambert retired as an employee on June 1, 2018.
2 Mr. Bove retired as an employee on July 1, 2018.
The following forms of share ownership apply toward the stock ownership requirements: shares purchased; vested and unvested restricted stock units; shares retained following the exercise of stock options; and other shares acquired through any other lawful means. Performance based restricted stock or stock units that have not yet met the performance tests are not applied toward the stock ownership requirements. All executives understand these requirements, and the Committee may use its discretion to reduce or eliminate future long-term incentive grants, or take such other actions as it deems appropriate, as motivation to meet guidelines. These ownership guidelines help drive a culture of ownership and accountability among the executive team.

Hedging and Pledging. The Company maintains an insider trading policy that restricts officers and directors in the trading of their Company stock. That policy specifically prohibits officers and directors from hedging or pledging their Company stock.

Recoupment Policy. The Company has a recoupment policy applicable to officers and other Company employees. In the event of a restatement of MSA's financial results or a determination of other misconduct that causes financial harm to the Company, the Board will review the circumstances that caused the restatement and consider issues of accountability for those who bore responsibility for the events. As part of that review, consideration would also be given to any appropriate action regarding compensation that may have been awarded to such persons. In particular, it would be appropriate to consider whether any compensation was awarded on the basis of having achieved specified performance targets, whether a person engaged in misconduct that contributed to the restatement and whether such compensation would have been reduced had the financial results been properly reported. Depending on the outcome of that review, appropriate action could include reducing compensation in the year the restatement was made, seeking repayment of any incentives received for the period restated or any gains realized as a result of exercising an option awarded for the period restated, or canceling any unvested equity compensation awarded for the period restated.

Perquisites. The Company provides executives with a limited number of perquisites in order to strengthen business relationships and maximize the use of our executives' time. Our perquisites have been benchmarked to the market and are considered ordinary, customary, and minimal for each executive's position. The following are available to the Named Officers:

- Automobile - each Named Officer is provided a Company leased vehicle to facilitate travel among MSA's various locations and for other business travel. Personal use of this automobile is calculated and imputed as income for each executive.


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COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

- Club memberships - country club memberships are provided to our CEO to facilitate customer contact and a business club is provided to our CEO and CFO to afford a downtown Pittsburgh location for business meetings.
- Financial planning and tax return assistance - provides advice and guidance to executives on investment and income tax issues in order to maximize the use and understanding of our executive compensation program and minimize time otherwise required for taxation issues.
- The Company does not own or lease an aircraft, nor does the Company have fractional ownership in any aircraft, nor does it pay for executives’ personal travel.
- Each Named Officer is offered a comprehensive annual executive physical to encourage executives to proactively manage their health.

Severance Policy. The Company has a severance pay policy that applies to the U.S. based Named Officers as well as other eligible salaried employees. The policy applies to a permanent termination of the employment relationship when initiated by the Company and when other conditions are satisfied. A schedule of benefits determines the separation benefit ranging from four weeks to a maximum of fifty-two weeks of severance pay based on final salary.

Tax Implications of Executive Compensation. Section 162(m) of the Internal Revenue Code currently imposes a $\$ 1$ million limit on the amount that a public company may deduct for compensation paid to an employee who is chief executive officer, chief financial officer, or another "covered employee" (as defined by Section 162(m)), or was such an employee beginning in any year after 2017. Prior to 2018, the Compensation Committee designed certain payments and awards intended to be exempt from this deduction limit as "performance-based compensation" and various plans, including the AIAP, were structured to comply with the Section 162(m) performance-based compensation requirements. The Tax Cuts and Jobs Acts, however, eliminated the "performance-based compensation" exception under Section 162(m) effective January 1, 2018, subject to a special rule that "grandfathers" certain awards or arrangements that were in effect on or before November 2, 2017. There can be no assurance that compensation structured prior to 2018 with the intent of qualifying as performance-based compensation will be deductible under Section 162(m), depending on the application of the grandfather rule. Additionally, compensation awarded in 2018 and future years to covered employees in excess of $\$ 1$ million also will generally not be deductible. The Compensation Committee retains the discretion to establish the compensation paid or intended to be paid or awarded to the Named Officers as the Committee may determine is in the best interest of the Company and its shareholders, and without regard to any limitation provided in Section $162(\mathrm{~m})$. This discretion is an important feature of the Committee's compensation practices because it provides the Committee with sufficient flexibility to respond to specific circumstances facing the Company.

Change in Control. The Company has entered into change in control employment agreements with each of the Named Officers. These agreements provide Named Officers up to three years income and benefits following a change in control of the Company. These agreements are intended to retain executives, provide continuity of management in the event of an actual or threatened change in control and enable executives to remain financially indifferent when evaluating opportunities that may be beneficial to shareholders yet could negatively impact the continued employment of the executive. Cash severance payments are payable and accelerated vesting of unvested equity awards occurs only in the event of both a change in control and termination of employment other than for cause, death or disability (commonly known as a "double trigger"). There are no tax gross-up provisions in the change in control agreements.

Equity Granting Process. The Company grants equity grants for executives and all other eligible associates at the first regularly scheduled Compensation Committee meeting of each calendar year. The Committee makes its grants effective on the later of the date of the Compensation Committee meeting at which the grant was made or the third business day after the Company's year-end earnings release.

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## COMPENSATION DISCUSSION AND ANALYSIS (CONTINUED)

Adjustments or Recovery of Prior Compensation. As described above under "Recoupment Policy," the Company maintains a recoupment policy to facilitate the recovery or adjustment of amounts previously awarded or paid to a Named Officer, in the event of a restatement of MSA's financial results or a determination of other misconduct that causes financial harm to the Company. Additionally, the Sarbanes-Oxley Act of 2002 provides that if the Company is required to restate its financial results due to material noncompliance with financial reporting requirements as a result of misconduct, the Chief Executive Officer and the Chief Financial Officer must reimburse the Company for any bonus, incentive or equity-based compensation received, and any profits realized from the sale of Company securities, during the twelve months following the issuance or filing of the noncompliant results.

## COMPENSATION COMMITTEE REPORT

The Compensation Committee of the Board of Directors has reviewed the Compensation Discussion and Analysis and has discussed it with management. Based upon its review and those discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Robert A. Bruggeworth
Thomas W. Giacomini
Diane M. Pearse
Rebecca B. Roberts, Chair

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## Summary Compensation Table

The following table shows the compensation for 2018, 2017 and 2016 of the Company's two principal executive officers who served in 2018, the Company's principal financial officer, the other three executive officers of the Company as of December 31, 2018 with the highest total compensation for 2018 (Messrs. Blanco, McClaine and Leenen), and one additional person who was an executive officer during 2018 and would have been one of the five persons included in the table if he had been an executive officer of the Company as of December 31, 2018 (Mr. Bove) (collectively, the "Named Officers"):

| Name and Principal Position | Year | Salary | Stock Awards (1) | Stock option awards <br> (2) |  | Non-equity incentive plan compensation (3) |  | Change in pension value <br> (4) |  | All other compensation (5) |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nishan J. Vartanian | 2018 | \$665,385 | \$ 974,543 | \$ | - | \$ | 733,013 | \$ | 377,809 | \$ | 62,803 | \$ 2,813,553 |
| President and Chief Executive | 2017 | \$452,399 | \$1,432,329 | \$ | - | \$ | 322,809 | \$ | 605,281 | \$ | 43,965 | \$ 2,856,783 |
| Officer | 2016 | \$384,642 | \$ 221,035 | \$ | 148,977 | \$ | 279,072 | \$ | 337,185 | \$ | 32,301 | \$ 1,403,211 |
| Kenneth D. Krause | 2018 | \$424,231 | \$ 593,446 | \$ | - | \$ | 372,196 | \$ | 52,002 | \$ | 55,232 | \$ 1,497,107 |
| Senior Vice President, Chief Financial | 2017 | \$391,635 | \$ 510,544 | \$ | - | \$ | 242,521 | \$ | 141,956 | \$ | 48,183 | \$ 1,334,839 |
| Officer and Treasurer | 2016 | \$308,395 | \$ 996,295 | \$ | 124,148 | \$ | 327,166 | \$ | 47,331 | \$ | 30,821 | \$ 1,834,156 |
| Steven C. Blanco (6) | 2018 | \$375,719 | \$ 501,253 | \$ | - | \$ | 315,202 | \$ | 37,453 | \$ | 41,231 | \$ 1,270,859 |
| Vice President and President | 2017 | \$ - | \$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ |
| MSA Americas | 2016 | \$ - | \$ - | \$ | - | \$ | - | \$ | - | \$ | - | \$ - |
| Douglas K. McClaine | 2018 | \$385,962 | \$ 347,024 | \$ | - | \$ | 244,156 | \$ | - | \$ | 42,838 | \$ 1,019,980 |
| Senior Vice President, Secretary | 2017 | \$372,682 | \$ 340,367 | \$ | - | \$ | 186,554 | \$ | 484,597 | \$ | 42,902 | \$ 1,427,102 |
| and Chief Legal Officer | 2016 | \$363,102 | \$ 164,838 | \$ | 167,600 | \$ | 240,237 | \$ | 256,058 | \$ | 36,557 | \$ 1,228,391 |
| Bob W. Leenen (6) | 2018 | \$375,879 | \$ 211,641 | \$ | - | \$ | 288,729 | \$ | 144,549 | \$ | 25,798 | \$ 1,046,596 |
| Vice President and President | 2017 | \$ | \$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ |
| MSA International | 2016 | \$ - | \$ - | \$ | - | \$ | - | \$ | - | \$ | - | \$ |
| William M. Lambert | 2018 | \$370,523 | \$1,082,286 | \$ | - | \$ | 393,446 | \$ | - | \$ | 80,425 | \$ 1,926,680 |
| Chairman and Former Chief | 2017 | \$829,899 | \$2,552,568 | \$ | - | \$ | 666,208 | \$ | 1,226,489 | \$ | 108,970 | \$ 5,384,124 |
| Executive Officer | 2016 | \$809,692 | \$ 941,887 | \$ | 957,598 | \$ | 980,393 | \$ | 951,324 | \$ | 94,593 | \$ 4,735,487 |
| Kerry M. Bove | 2018 | \$192,635 | \$ 185,090 | \$ | - | \$ | 110,071 | \$ | - | \$ | 588,276 | \$ 1,076,072 |
| Former Senior Vice President and Chief | 2017 | \$368,728 | \$ 359,304 | \$ | - | \$ | 155,469 | \$ | 406,824 | \$ | 43,005 | \$ 1,333,330 |
| Strategy Officer | 2016 | \$359,758 | \$ 174,030 | \$ | 176,916 | \$ | 228,789 | \$ | 236,556 | \$ | 42,251 | \$ 1,218,300 |

(1) Represents the aggregate grant date fair value of the restricted stock unit awards and performance stock unit awards computed in accordance with FASB ASC Topic 718 . For the performance stock unit awards, the amounts disclosed in the table are based upon the target amount of shares granted. If maximum share payouts were achieved for such units, the aggregate grant date fair value for such units would be twice the amount disclosed in each year in the table related to such performance stock units. In the event of such maximum payouts the totals in the stock awards column would be: (i) for 2018, \$2,338,903 for Mr. Vartanian, \$1,258,075 for Mr. Krause, \$1,062,677 for Mr. Blanco, \$832,858 for Mr. McClaine, \$409,158 for Mr. Leenen, \$1,082,286 for Mr. Lambert and $\$ 185,090$ for Mr. Bove, (ii) for 2017, $\$ 2,869,457$ for Mr. Vartanian, $\$ 816,570$ for Mr. Krause, $\$ 680,451$ for Mr. McClaine, $\$ 5,103,018$ for Mr. Lambert and $\$ 718,310$ for Mr. Bove and (iii) for 2016, $\$ 367,577$ for Mr. Vartanian, $\$ 368,392$ for Mr. Krause, $\$ 329,676$ for Mr. McClaine, $\$ 1,883,773$ for Mr. Lambert, and $\$ 384,059$ for Mr. Bove.
(2) Represents the aggregate grant date fair value of the stock option awards, computed in accordance with FASB ASC Topic 718.
(3) Represents the aggregate amount of incentive awards earned by the Named Officer under the Non-CEO Executive Incentive Program, the CEO Annual Incentive Award Plan and the Enhanced Bonus. See "Performance-Based Annual Cash Incentive" in the Compensation Discussion and Analysis above.
(4) Represents the amount of the aggregate increase for 2018 in the actuarial present value of the Named Officer's accumulated benefits under the defined benefit retirement plans described under "Pension Benefits" below. Pension benefits are not available to the executive in a lump-sum present value form and changes in the interest rate or the mortality rates used to calculate present values can cause wide fluctuations in the "change in Pension value" even though there has been no change to the way the annuity benefits are calculated.

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(5)

The following table describes the 2018 amounts included under "All Other Compensation:"

| Name | Perquisites and personal benefits (A) |  |  | any <br> tions <br> ned <br> plans | Insurance premiums |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nishan J. Vartanian | \$ | 23,275 | \$ | 39,528 | \$ | - | \$ | - |  | 62,803 |
| Kenneth D. Krause | \$ | 28,558 | \$ | 26,670 | \$ | - | \$ | - |  | 55,228 |
| Steven C. Blanco | \$ | 17,615 | \$ | 23,616 | \$ | - | \$ | - |  | 41,231 |
| Douglas K. McClaine | \$ | 15,671 | \$ | 22,901 | \$ | 4,266 | \$ | - |  | 42,838 |
| Bob W. Leenen | \$ | 25,798 | \$ | - | \$ | - | \$ | - |  | 25,798 |
| William M. Lambert | \$ | 38,518 | \$ | 41,469 | \$ | 438 | \$ | - |  | 80,425 |
| Kerry M. Bove | \$ | 17,327 | \$ | 13,924 | \$ | 525 |  | ,500(B) |  | 888,276 |

(A) The amounts consist of the cost of personal use of a Company car, tax and investment assistance, executive physicals and, for Messrs. Vartanian, Krause and Lambert, club memberships.
(B) Consists of one-time payment in connection with retirement.
(6) Messrs. Blanco and Leenen were not Named Officers in 2016 or 2017 under the rules of the Securities and Exchange Commission.

## Grants of Plan-Based Awards

The following table shows the grants of plan-based awards made to the Named Officers in 2018:

|  | Estimated possible payouts under non-equity incentive plan awards (1) |  |  |  | Estimated possible payouts under equity incentive plan awards (2) |  |  | Stock and stock unit awards (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Grant date | Threshold | Target | Maximum | Threshold | Target | Maximum | Number of shares or units | Grant date fair value |
| Nishan J. Vartanian | 02/23/2018 | \$ 382,500 | \$765,000 | \$1,530,000 | \$ 487,272 | \$974,543 | \$2,338,903 | - | - |
| Kenneth D. Krause | 02/23/2018 | \$ 137,800 | \$275,600 | \$ 551,200 | \$ 237,367 | \$474,734 | \$1,139,362 | 1,420 | \$ 118,712 |
| Steven C. Blanco | 02/23/2018 | \$ 125,337 | \$250,673 | \$ 501,346 | \$ 200,509 | \$401,017 | \$ 962,441 | 1,199 | \$ 100,236 |
| Douglas K. McClaine | 02/23/2018 | \$ 96,413 | \$192,825 | \$ 385,650 | \$ 173,512 | \$347,024 | \$ 832,858 | - | - |
| Bob W. Leenen | 02/23/2018 | \$ 114,288 | \$228,575 | \$ 457,150 | \$ 70,542 | \$141,083 | \$ 338,599 | 844 | \$ 70,558 |
| William M. Lambert | 02/23/2018 | \$ 413,100 | \$826,200 | \$1,652,400 | - | - | - | 12,946 | \$1,082,286 |
| Kerry M. Bove | 02/23/2018 | \$ 96,413 | \$192,825 | \$ 385,650 | - | - | - | 2,214 | \$ 185,090 |

(1) Represents the amounts which could have been earned by the Named Officer through 2018 performance at the threshold, target and maximum levels under the annual incentive plans described under "Performance-Based Annual Cash Incentive" in the Compensation Discussion and Analysis above. The actual amounts earned are shown in the "Non-equity incentive plan compensation" column in the Summary Compensation Table above.
(2) Represents the amount that could be earned by the Named Officer at the threshold, target and maximum levels of shares to be issued with respect to the performance stock units granted to the Named Officer under the Company's Amended and Restated 2016 Management Equity Incentive Plan. The performance period runs through December 31, 2020. The amounts shown are based upon the ASC 718 value of the applicable number of shares of the Company's Common Stock.
(3) Represents time-vesting restricted stock unit awards granted to each Named Officer in 2018 under the Company's Amended and Restated 2016 Management Equity Incentive Plan. To earn the award, the officer must remain employed by the Company or a subsidiary through a date which is approximately the third anniversary of the grant date. Restricted stock units will also vest earlier upon a change in control or if the grantee's employment terminates due to death, disability or retirement under a Company retirement plan. Messrs. Lambert and Bove retired in 2018, and Messrs. Vartanian and McClaine are eligible to retire under the Company's pension plan.

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## Outstanding Equity Awards at Fiscal Year-End

The following table shows the outstanding equity awards held by the Named Officers at December 31, 2018:

|  | Option Awards |  |  |  | $\begin{aligned} & \text { Expiration } \\ & \text { date } \end{aligned}$ | Number of shares or stock units that have not vested | Stock Awards |  |  | Performance Stock Unit Awards |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Number exercisable | Number un-exercisable | Date exercisable | Option exercise price |  |  | Vesting date | Market value of shares or stock units that have not vested(1) |  | Number of unearned stock units that have not vested | Vesting <br> Date(2) | Market value of unearned stock units that have not vested(1) |  |
| Nishan J. Vartanian | 2,535 | - | 2/23/2013 | \$24.630 | 2/23/2020 | 1,674 | 3/8/2019 | \$ | 157,808 | 3,348 | 3/8/2019 | \$ | 315,616 |
|  | 3,516 | - | 2/23/2014 | \$33.550 | 2/23/2021 | 6,306 | 6/26/2020 | \$ | 594,467 | 6,017 | 3/8/2020 | \$ | 567,223 |
|  | 4,035 | - | 2/17/2015 | \$36.690 | 2/17/2022 | - | - |  | - | 6,306 | 3/8/2020 | \$ | 594,467 |
|  | 3,402 | - | 2/20/2016 | \$48.950 | 2/20/2023 | - | - |  | - | 11,660 | 3/8/2021 | \$ | 1,099,188 |
|  | 6,160 | - | 2/26/2017 | \$51.690 | 2/26/2024 | - | - |  | - | - | - |  | - |
|  | 11,623 | - | 2/25/2018 | \$48.640 | 2/25/2025 | - | - |  | - | - | - |  | - |
|  | - | 12,744 | 3/1/2019 | \$44.500 | 3/1/2026 | - | - |  | - | - | - |  | - |
| Kenneth D. Krause | 1,488 | - | 2/26/2017 | \$51.690 | 2/26/2024 | 2,790 | 3/8/2019 | \$ | 263,013 | 2,790 | 3/8/2019 | \$ | 263,013 |
|  | 1,685 | - | 2/25/2018 | \$48.640 | 2/25/2025 | 11,095 | 12/14/2019 | \$ | 1,045,926 | 5,651 | 3/8/2020 | \$ | 532,720 |
|  | - | 10,620 | 3/1/2019 | \$44.500 | 3/1/2026 | 1,413 | 3/8/2020 | \$ | 133,204 | 5,680 | 3/8/2021 | \$ | 535,454 |
|  | - | - | - | - | - | 1,420 | 3/8/2021 | \$ | 133,863 | - | - |  | - |
| Steven C. Blanco | 3,571 | - | 2/20/2016 | \$48.950 | 2/20/2023 | 1,199 | 3/8/2019 | \$ | 113,030 | 2,283 | 3/8/2019 | \$ | 215,218 |
|  | 4.217 | - | 2/26/2017 | \$51.690 | 2/26/2024 | 1,142 | 3/8/2020 | \$ | 107,656 | 2,855 | 3/8/2020 | \$ | 269,141 |
|  | 6,341 | - | 2/25/2018 | \$48.640 | 2/25/2025 | 714 | 3/8/2021 | \$ | 67,309 | 4,798 | 3/8/2021 | \$ | 452,307 |
|  | - | 8,691 | 3/1/2019 | \$44.500 | 3/1/2026 | - | - |  | - | - | - |  | - |
| Douglas K. McClaine | 2,980 | - | 2/23/2014 | \$33.550 | 2/23/2021 | - | - |  | - | 3,766 | 3/8/2019 | \$ | 355,021 |
|  | 9,668 | - | 2/17/2015 | \$36.690 | 2/17/2022 | - | - |  | - | 4,709 | 3/8/2020 | \$ | 443,917 |
|  | 10,002 | - | 2/20/2016 | \$48.950 | 2/20/2023 | - | - |  | - | 4,152 | 3/8/2021 | \$ | 391,409 |
|  | 8,317 | - | 2/26/2017 | \$51.690 | 2/26/2024 | - | - |  | - | - | - |  | - |
|  | 10,461 | - | 2/25/2018 | \$48.640 | 2/25/2025 | - | - |  | - | - | - |  | - |
|  | - | 14,337 | 3/1/2019 | \$44.500 | 3/1/2026 | - | - |  | - | - | - |  | - |
| Bob W. Leenen | - | 1,909 | 3/1/2019 | \$44.500 | 3/1/2026 | 602 | 3/8/2019 | \$ | 56,751 | 502 | 3/8/2019 | \$ | 47,324 |
|  | - | - | - | - | - | 502 | 3/8/2019 | \$ | 47,324 | 872 | 3/8/2020 | \$ | 82,203 |
|  | - | - | - | - | - | 436 | 3/8/2020 | \$ | 41,102 | 1,688 | 3/8/2021 | \$ | 159,128 |
|  | - | - | - | - | - | 844 | 3/8/2021 | \$ | 79,564 | - | - | \$ | - |
| William M. Lambert | 52,163 | - | 2/23/2014 | \$33.550 | 2/23/2021 | - | - |  | - | 21,519 | 3/8/2019 | \$ | 2,028,596 |
|  | 51,374 | - | 2/17/2015 | \$36.690 | 2/17/2022 | - | - |  | - | 35,315 | 3/8/2020 | \$ | 3,329,145 |
|  | 53,922 | - | 2/20/2016 | \$48.950 | 2/20/2023 | - | - |  | - | - | - |  | - |
|  | 44,599 | - | 2/26/2017 | \$51.690 | 6/1/2023 | - | - |  | - | - | - |  | - |
|  | 59,770 | - | 2/25/2018 | \$48.640 | 6/1/2023 | - | - |  | - | - | - |  | - |
|  | 81,916 | - | 6/1/2018 | \$44.500 | 6/1/2023 | - | - |  | - | - | - |  | - |
| Kerry M. Bove | 3,345 | - | 2/26/2017 | \$51.690 | 7/1/2023 | - | - |  | - | 3,976 | 3/8/2019 | \$ | 374,818 |
|  | - | - | - | - | - | - | - |  | - | 4,971 | 3/8/2020 | \$ | 468,616 |
|  | - | - | - | - | - | - | - |  | - | - | - |  | - |
|  | - | - | - | - | - | - | - |  | - | - | - |  | - |

(1) Based on the $\$ 94.27$ closing price for the Company's Common Stock as of December 31, 2018.
(2) The final vesting date of these performance stock units will be March 8 of the third year after the units were awarded, assuming that the Compensation Committee determines whether, and to what extent, the performance requirements related to the awards have been met, subject to the earlier vesting of the performance conditions of a percentage of the awards if applicable annual performance tests are met, in which case the final (time-based) vesting date for such percentage of awards will be March 8 of the third year after the units were awarded, if the employee remains employed by the Company at that date.

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## Option Exercises and Stock Vested

The following table shows the stock options exercised by the Named Officers and the restricted stock awards vested for the Named Officers during 2018:

|  | Option awards |  | Stock awards |  |
| :---: | :---: | :---: | :---: | :---: |
| Name | Number of shares acquired on exercise | Value realized on exercise(1) | Number of shares acquired on vesting | Value realized on vesting(2) |
| Nishan J. Vartanian | 2,483 | \$ 160,559 | 3,496 | \$ 296,391 |
| Kenneth D. Krause | 2,434 | \$ 162,569 | 3,346 | \$ 319,422 |
| Steven C. Blanco | 2,492 | \$ 152,399 | 2,297 | \$ 248,151 |
| Douglas K. McClaine | 20,849 | \$1,492,068 | 3,147 | \$ 266,803 |
| Bob W. Leenen | - | \$ - | 364 | \$ 30,742 |
| William M. Lambert | 9,681 | \$ 448,628 | 30,923 | \$2,728,068 |
| Kerry M. Bove | 55,353 | \$2,921,720 | 5,535 | \$ 494,851 |

(1) Represents the difference between the market value on the date of exercise of the shares acquired and the option exercise price.
 units which had met performance tests.

## Pension Benefits

The following table provides information concerning the value of the Named Officers' accumulated benefits under the Company's defined benefit retirement plans as of December 31, 2018:

| Name | Plan name | Number of years credited service | Present value of accumulated benefit |  | Payments during last fiscal year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nishan J. Vartanian | MSA Pension Plan | 33.5 | \$ | 1,033,421 |  | - |
|  | MSA Supplemental Pension Plan | 33.5 | \$ | 1,933,047 |  | - |
|  | Supplemental Executive Retirement Plan | 33.5 |  | - |  |  |
| Kenneth D. Krause | MSA Pension Plan | 12.3 | \$ | 188,534 |  | - |
|  | MSA Supplemental Pension Plan | 12.3 | \$ | 185,774 |  | - |
|  | Supplemental Executive Retirement Plan | 12.3 |  | - |  |  |
| Steven C. Blanco | MSA Pension Plan | 6.7 | \$ | 148,195 |  | - |
|  | MSA Supplemental Pension Plan | 6.7 | \$ | 157,783 |  | - |
|  | Supplemental Executive Retirement Plan | 6.7 |  | - |  | - |
| Douglas K. McClaine | MSA Pension Plan | 34.3 | \$ | 1,219,493 |  | - |
|  | MSA Supplemental Pension Plan | 34.3 | \$ | 1,579,101 |  | - |
|  | Supplemental Executive Retirement Plan | 34.3 | \$ | 450,635 |  | - |
| Bob W. Leenen | MSA Pension Plan (1) | 4.2 |  | 330,167 |  | - |
|  | MSA Supplemental Pension Plan | 4.2 |  | - |  | - |
|  | Supplemental Executive Retirement Plan | 4.2 |  | - |  | - |
| William M. Lambert (2) | MSA Pension Plan | 36.8 | \$ | 1,150,701 | \$ | 38,292 |
|  | MSA Supplemental Pension Plan | 36.8 | \$ | 6,664,543 | \$ | 223,632 |
|  | Supplemental Executive Retirement Plan | 36.8 | \$ | 729,522 | \$ | 38,880 |
| Kerry M. Bove (3) | MSA Pension Plan | 38.1 | \$ | 1,300,422 |  | - |
|  | MSA Supplemental Pension Plan | 38.1 | \$ | 1,435,320 |  | - |
|  | Supplemental Executive Retirement Plan | 38.1 | \$ | 439,578 |  | - |

(1) Mr. Leenen is a participant in the Swiss Life Pension Plan
(2) Mr. Lambert retired effective June 1, 2018.
(3) Mr. Bove retired effective July 1, 2018.

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## Pension Plan

Introduction. The MSA Pension Plan is a retirement plan that covers most U.S. salaried employees and certain U.S. hourly employees.
To have a non-forfeitable right to a benefit under the Pension Plan, a participant must complete five years of service with the Company or an affiliate, or attain age 65 while employed by the Company or an affiliate. The Pension Plan's normal retirement age is identical to the participant's "Social Security Retirement Age." The Social Security Full Retirement Age is established by Federal law, and varies from age 65 for persons born before 1938 to age 67 for persons born in 1960 or later years.

Benefits at Normal Retirement Age. A participant who retires upon reaching normal retirement age can begin receiving pension payments as of the first day of the following calendar month, which is referred to as the participant's "normal retirement date."

The Pension Plan has a minimum benefit formula that applies to only a small number of lower-paid participants. The majority of participants who begin receiving benefits on their normal retirement date are entitled to receive a monthly benefit equal to the sum of the amounts shown in (a), (b) and (c) below:

| (a) $0.80 \%$ | x | Average Monthly Earnings up to <br> Average Social Security Wage Base <br> plus | x Credited Service |
| :---: | :---: | :---: | :---: | :---: |
| up to 35 Years |  |  |  |

For purposes of the normal retirement benefit formula, the following terms have the following meanings:

- "Average Monthly Earnings" is generally the average of monthly compensation received during the participant’s highest five consecutive calendar years of compensation over the last ten years of employment. Compensation is generally the total cash payments received by a participant for services performed, before any reductions for employee contributions to $401(\mathrm{k})$ or other employee benefit plans. Compensation does not include any expense reimbursements, income attributable to non-cash benefits, or certain other miscellaneous payments. The compensation that can be taken into account each year is limited by Federal law. The 2019 limit is $\$ 280,000$, but this number may be adjusted in future years for cost-of-living increases.
- "Average Social Security Wage Base" is the average of the Social Security taxable wage bases in effect under Federal law during the 35-year period ending in the calendar year in which the participant attains Social Security Retirement Age.
- "Credited Service" is a participant's actual period of service with the Company as an employee in a category of employment that is covered by the Pension Plan.

Benefits at Early Retirement Age. The Pension Plan permits early retirement by participants who have (i) reached age 55 with at least 15 years of service, or (ii) reached age 60 with at least 10 years of service. Messrs. Vartanian and McClaine are currently eligible for early retirement. Participants who elect early retirement can choose to begin receiving pension benefits immediately, in which case their monthly benefit amount will be reduced to reflect the early start of payments; or they may choose to delay the start of payments until their normal retirement date, at which time they will receive unreduced benefits determined under the normal retirement benefit formula described above.

If a participant takes early retirement and begins receiving pension payments before his or her normal retirement date, the monthly pension benefit will be determined under the normal retirement formula, but will be reduced by (i) 5/9ths of $1 \%$

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for each of the first 60 months that benefits begin before the normal retirement date, plus (ii) $5 / 18$ ths of $1 \%$ for each of the next 60 months that benefits begin before the normal retirement date, plus (iii) . $345 \%$ for each of the next 12 months that benefits begin before the normal retirement date, plus (iv) $.3108 \%$ for each of the next 12 months that benefits begin before the normal retirement date. Different reduction factors apply to the minimum benefit formula.

Forms of Payment. In general, Pension Plan benefits are paid as a stream of monthly benefits, referred to as an annuity (the only exception is that benefits with a present value of $\$ 5,000$ or less are automatically paid in a lump sum following termination of employment). The normal form of payment for an unnamed participant is a "single life annuity" that pays monthly benefits to the participant for his or her life only. The normal form of payment for a married participant is a "qualified joint and survivor annuity" that pays monthly benefits to the participant for life, and, after the participant's death, pays monthly benefits to the participant's surviving spouse in an amount equal to $50 \%$ of the monthly amount payable during the participant's lifetime. The Pension Plan also permits a participant to elect from among several optional forms of annuity payment that are of equivalent actuarial value to the normal form of payment.

Even though the Named Officers who participate in the Pension Plan cannot receive a lump sum distribution from the Pension Plan, the pension benefit table is required to show a present value for each individual's accumulated Pension Plan benefit payable at normal retirement age. That present value was calculated by using an annual interest rate of $4.40 \%$ and the RP-2014 mortality table with generational projection using the Buck Modified 2018 projection scale.

## Supplemental Pension Plan

Introduction. The MSA Supplemental Pension Plan is a nonqualified retirement plan that provides plan participants with pension benefits that they would have received under the Pension Plan except for certain limitations imposed by Federal law, including the limitation on compensation that can be taken into account.

Benefits at Normal Retirement Age. The monthly benefit payable under the Supplemental Pension Plan to a participant who begins receiving benefits on his or her normal retirement date will be equal to the difference between (i) the amount that would have been payable under the Pension Plan on the normal retirement date if there were no limitations placed by law upon compensation taken into account or upon the amount of annual benefit payments, and (ii) the amount that is actually payable to the participant under the Pension Plan.

Benefits at Early Retirement Age. The monthly benefit payable under the Supplemental Pension Plan to a participant who is eligible for early retirement under the Pension Plan and who begins receiving benefits under the Pension Plan before his or her normal retirement date will be equal to the difference between (i) the amount that would have been payable under the Pension Plan if there were no limitations placed by law upon compensation taken into account or upon the amount of annual benefits, and (ii) the amount that is actually payable to the participant under the Pension Plan. Messrs. Vartanian and McClaine are currently eligible for early retirement.

Forms of Payment. Benefits payable under the Supplemental Pension Plan are generally payable in the same form that the participant's benefits are payable under the Pension Plan. However, in the event of a vested participant's termination within a two-year period after a corporate change in control (as defined in the Supplemental Pension Plan), the participant will receive a lump sum payment that is actuarially equivalent to the participant's Supplemental Pension Plan benefit.

Even though the Named Officers who participate in the Supplemental Pension Plan are not eligible to receive a lump sum unless a change in control occurs, the pension benefit table is required to show a present value at December 31, 2018 for each individual's accumulated Supplemental Pension Plan benefit. That present value was calculated using an annual interest rate of $4.38 \%$ and the RP-2014 white collar mortality table with generational projection using the Buck Modified 2018 projection scale. This plan was closed to new entrants after December 31, 2012.

## Supplemental Executive Retirement Plan

The MSA Supplemental Executive Retirement Plan provides a defined benefit at retirement. Only certain officers of the Company are eligible for this program. No benefit is payable unless the officer stays with the Company until he or she reaches retirement eligibility, that is, age 55 plus a combination of age and service equal to at least 70 . The benefit is payable in equal

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installments over 15 years. The benefit amount for Mr. Lambert is $\$ 1,000,000$, and the benefit amount for all other eligible officers is $\$ 600,000$. In the event of death of the participant after retirement, remaining payments are paid to the spouse or other beneficiary. No new officers have been added to this plan since its inception on January 1, 2008 and the plan was formally closed to new entrants after August 31, 2013.

## Nonqualified Deferred Compensation

The following table provides information concerning deferrals by the Named Officers of their earned compensation under the Company's nonqualified deferred compensation plans:

| Name | Executive contributions in 2018(1) |  | Company contributions in 2018(2) |  | Aggregate earnings in 2018(3) | Aggregate withdrawals/ distributions | Aggregatebalance at$12 / 31 / 2018(4)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nishan J. Vartanian | \$ | 49,924 | \$ | 28,528 | \$ $(26,405)$ | - | \$ | 525,328 |
| Kenneth D. Krause | \$ | 27,423 | \$ | 15,670 | \$ $(4,622)$ | - | \$ | 103,535 |
| Steven C. Blanco | \$ | 22,078 | \$ | 12,616 | \$ $(15,852)$ | - | \$ | 154,594 |
| Douglas K. McClaine | \$ | 78,078 | \$ | 11,901 | \$ $(40,683)$ | - | \$ | 586,541 |
| Bob W. Leenen (5) |  | - |  | - | - | - |  | - |
| William M. Lambert | \$ | 99,956 | \$ | 30,469 | \$ (329) | \$ (2,828,250) | \$ | 129,113 |
| Kerry M. Bove | \$ | 5,117 | \$ | 2,924 | \$ 13,912 | \$ $(531,324)$ |  | - |

(1) These amounts are reported in the Summary Compensation Table as salary or non-equity incentive plan compensation, as applicable.
(2) These amounts are reported in the Summary Compensation Table under "Other Compensation."
(3) The above table reflects the Company's Supplemental Retirement Savings Plan. Earnings on deferred compensation under the Supplemental Retirement Savings Plan are not above market or preferential and are therefore not included in the Summary Compensation Table. Participants elect to have their accounts treated as if invested in one or more of a selection of publicly available mutual funds similar to those available under the Company's Retirement Savings Plan, a qualified 401(k) plan. Accounts are credited with earnings or losses based on the investment results of the funds selected. See Supplemental Retirement Savings Plan discussion immediately below for further information.
(4) Of the balances shown, the following amounts represent executive and Company contributions which either were reported in the Summary Compensation Table in the year of the contribution or would have been so reported had the individual been a Named Officer for that year: Mr. Vartanian, \$492,857; Mr. Krause, \$105,328; Mr. Blanco, \$169,785; Mr. McClaine, \$448,627; Mr. Lambert, $\$ 1,620,944$; and Mr. Bove, $\$ 390,265$. The remainder represents non-preferential market earnings not reportable in the Summary Compensation Table.
(5) As a non-U.S. executive, Mr. Leenen is not eligible to participate in the MSA Supplemental Savings Plan (nonqualified deferred compensation plan).

## Supplemental Retirement Savings Plan

For the Named Officers, the amounts shown in the Nonqualified Deferred Compensation table relate to the MSA Supplemental Retirement Savings Plan (SSP). The SSP permits the Named Officers and other eligible employees to defer compensation in excess of the limits imposed by the Internal Revenue Code on employee contributions to the Company's Retirement Savings Plan (RSP), a qualified 401(k) Plan. The Company matches $100 \%$ of the first $1 \%$ of participant deferrals and $50 \%$ of up to the next $6 \%$ of eligible compensation, whether contributed to the RSP or deferred under the SSP. Participant contributions are vested at all times. Company matching contributions vest upon completion of two years of service, or earlier upon death, attainment of age 65 or a change in control.

Compensation eligible for deferral under the SSP includes salary, annual incentive bonus and other cash remuneration for services rendered. There are certain limits on the percentage of eligible compensation that a participant may defer. Participants may elect to have their SSP accounts treated as if invested in one or more of a selection of publicly available mutual funds similar to those available under the RSP. Accounts are credited with earnings or losses based on the investment results of the funds selected. Participants may change their investment elections, for either new contributions and/or for existing balances, at any time.

Distribution options under the SSP vary depending upon the year in which compensation was deferred. Distribution of amounts deferred prior to 2003 commences upon termination of employment or an earlier change in control and is paid either in a lump sum or in five annual installments, as elected by the participant. For amounts deferred in 2003 or thereafter, the participant could elect an alternate date for the commencement of distributions, which for subsequent distribution

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elections in 2005 and thereafter must be at least five years later than the original distribution date. Absent such an election, distributions commence upon the first day of the seventh month following termination of employment. Distributions are made either in a lump sum or in up to 15 annual installments, as elected by the participant. The timing of participant elections, both as to deferrals and as to distributions, is restricted in accordance with Internal Revenue Service requirements.

## Potential Payments upon Termination or Change-in-Control

The tables below show the payments and benefits to which each Named Officer would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the tables. In addition to severance amounts payable in certain circumstances under the plan and agreements described following the tables, the amounts shown in the tables include compensation and retirement and other benefits previously earned through service by the Named Officer as described above.

## Nishan J. Vartanian

The following table shows the payments and benefits to which Nishan J. Vartanian would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the table:

|  | Voluntary termination |  | Involuntary termination for cause |  | Involuntary termination without cause |  | Death |  | Disability |  | Change in control termination |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash severance (1) | \$ | - | \$ | - | \$ | 765,000 | \$ | \$ - | \$ | - - | \$ | 2,131,881 |
| Disability income (2) | \$ | - | \$ | - | \$ | - | \$ | \$ - | \$ | 1,930,727 | \$ | - |
| Earned award under non-equity incentive plans (3) | \$ | 733,013 | \$ | - | \$ | 733,013 |  | 733,013 | \$ | 733,013 | \$ | 733,013 |
| Equity (4): |  |  |  |  |  |  |  |  |  |  |  |  |
| Restricted stock | \$ | 752,275 | \$ | - | \$ | 752,275 |  | 752,275 | \$ | 752,275 | \$ | 752,275 |
| Unexercisable Options | \$ | 634,269 | \$ | - | \$ | 634,269 |  | - 634,269 | \$ | 634,269 | \$ | 634,269 |
| Performance Award |  | 2,576,494 | \$ | - | \$ | 2,576,494 | \$ | 2,576,494 | \$ | 2,576,494 | \$ | 2,576,494 |
| Retirement benefits: |  |  |  |  |  |  |  |  |  |  |  |  |
| Defined benefit plans (5) |  |  |  |  |  |  |  |  |  |  |  |  |
| Pension Plan |  | 1,033,421 |  | 1,033,421 | \$ | 1,033,421 |  | - 911,234 | \$ | 1,033,421 | \$ | 1,033,421 |
| Supplemental Pension Plan |  | 1,933,047 | \$ | 1,933,047 | \$ | 1,933,047 |  | 1,702,531 |  | 1,933,047 | \$ | 1,948,161 |
| Supplemental Executive Retirement Plan | \$ | - | \$ | - | \$ | - | \$ | \$ - | \$ | - - | \$ | - |
| Defined contribution plans (6) |  |  |  |  |  |  |  |  |  |  |  |  |
| 401(k) Retirement Savings Plan |  | 1,281,858 |  | 1,281,858 | \$ | 1,281,858 | S | 1,281,858 | \$ | 1,281,858 | \$ | 1,281,858 |
| Supplemental Savings Plan | \$ | 525,328 | \$ | 525,328 | \$ | 525,328 | \$ | 525,328 | \$ | 525,328 | \$ | 525,328 |
| Retiree medical (7) | \$ | 161,089 | \$ | 161,089 | \$ | 161,089 | \$ | \$ - | \$ | - - | \$ | 161,089 |
| Other Benefits: |  |  |  |  |  |  |  |  |  |  |  |  |
| Health \& Welfare (8) | \$ | - | \$ | - | \$ | - | S | 72,873 | \$ | 161,089 | \$ | - |
| Insurance benefits (9) | \$ | - | \$ | - | \$ | - | \$ | 1,000,000 | \$ | - - | \$ | - |
| Outplacement assistance | \$ | - | \$ | - | \$ | 25,000 | \$ | - | \$ | - | \$ | 25,000 |
| Total |  | 9,630,794 |  | 4,934,743 | \$ | 10,420,794 |  | 10,189,875 |  | 11,561,521 | \$ | 11,802,789 |

(1) Represents the cash severance amount payable under the MSA Salaried Severance Pay Plan or the Change in Control Severance Agreements described below.
(2) Represents the present value of the future payments that should be payable under the terms of the Company's long-term disability plan, which provides an annual benefit of $60 \%$ of salary up to a maximum annual benefit of $\$ 360,000$.
(3) Represents the amount earned through completion of the plan year under the Company's non-equity incentive award plans, as shown in the Summary Compensation Table above.
(4) The amount shown is the market value of equity awards held by the Named Officer at December 31, 2018. Under the terms of the Amended and Restated 2016 Management Equity Incentive Plan, equity awards vest early upon a change in control or upon termination of employment due to death, disability or retirement under a Company retirement plan. At December 31, 2018, Mr. Vartanian was eligible to retire under the Company's pension plan.
(5) Represents the present value of the Named Officer's accumulated benefits under the Company's defined benefit retirement plans described above. The increase in present value for termination following a change in control results from the plans' provisions for a lump sum payment upon termination of employment within two years after a change in control. The values upon death reflect survivor benefits.

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(6) Represents the balances at December 31, 2018 in the Named Officer's accounts under the Company's qualified and nonqualified defined contribution plans.
(7) The Company has a nondiscriminatory plan available generally to United States salaried employees which provides medical benefits to employees who retire under the Company's Pension Plan until they become eligible for Medicare benefits. The amount shown in the table represents the estimated cost of providing plan benefits to the Named Officer. This plan was closed to new participants effective January 1, 2010.
(8) The amount shown for death represents the present value of the cost of continued dependent medical care coverage under the Company's health and welfare plan. The amount shown for disability is the present value of the cost of continued medical care coverage for the Named Officer and dependents.
(9) The amounts payable on death are the death benefits under the Company's group term life insurance policy and an individual life insurance policy, which is payable by the insurer.

## Kenneth D. Krause

The following table shows the payments and benefits to which Kenneth D. Krause would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the table:

|  | Voluntary termination |  | Involuntary termination for cause |  | Involuntary termination without cause |  | Death |  | Disability | Change in control termination |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash severance (1) | \$ | - | \$ | - | \$ | 142,212 | \$ | - | \$ | \$ 1,439,686 |
| Disability income (2) | \$ | - | \$ | - | \$ | - | \$ | - | \$3,628,771 | \$ |
| Earned award under non-equity incentive plans (3) | \$ | 372,196 | \$ | - | \$ | 372,196 | \$ | 372,196 | \$ 372,196 | \$ 372,196 |
| Equity (4): |  |  |  |  |  |  |  |  |  |  |
| Restricted stock | \$ | - | \$ | - | \$ | - |  | ,576,006 | \$1,576,006 | \$ 1,576,006 |
| Unexercisable Options | \$ | - | \$ | - | \$ | - | \$ | 528,557 | \$ 528,557 | \$ 528,557 |
| Performance Award | \$ | - | \$ | - | \$ | - |  | ,331,187 | \$1,331,187 | \$ 1,331,187 |
| Retirement benefits: |  |  |  |  |  |  |  |  |  |  |
| Defined benefit plans (5) |  |  |  |  |  |  |  |  |  |  |
| Pension Plan | \$ | 188,534 | \$ | 188,534 | \$ | 188,534 | \$ | 84,860 | \$ 188,534 | \$ 188,534 |
| Supplemental Pension Plan | \$ | 185,774 | \$ | 185,774 | \$ | 185,774 | \$ | 83,479 | \$ 185,774 | \$ 185,774 |
| Supplemental Executive Retirement Plan | \$ | - | \$ | - | \$ | - | \$ | - | \$ | \$ |
| Defined contribution plans (6) |  |  |  |  |  |  |  |  |  |  |
| 401(k) Retirement Savings Plan | \$ | 443,056 | \$ | 443,056 | \$ | 443,056 | \$ | 443,056 | \$ 443,056 | \$ 443,056 |
| Supplemental Savings Plan | \$ | 103,535 | \$ | 103,535 | \$ | 103,535 | \$ | 103,535 | \$ 103,535 | \$ 103,535 |
| Retiree medical (7) | \$ | - | \$ | - | \$ | - | \$ | - | \$ - | \$ - |
| Other Benefits: |  |  |  |  |  |  |  |  |  |  |
| Health \& Welfare (8) | \$ | - | \$ | - | \$ | - | \$ | 37,754 | \$ 423,429 | \$ 228,412 |
| Insurance benefits (9) | \$ | - | \$ | - | \$ | - |  | ,000,000 | \$ - | \$ - |
| Outplacement assistance | \$ | - | \$ | - | \$ | 25,000 | \$ | - | \$ - | \$ 25,000 |
| Total |  | 1,293,095 | \$ | 920,899 | \$ | 1,460,307 |  | ,560,630 | \$8,781,045 | \$ 6,412,840 |

(1) Represents the cash severance amount payable under the MSA Salaried Severance Pay Plan or the Change in Control Severance Agreements described below.
(2) Represents the present value of the future payments that should be payable under the terms of the Company's long-term disability plan, which provides an annual benefit of $60 \%$ of salary up to a maximum annual benefit of $\$ 360,000$.
(3) Represents the amount earned through completion of the plan year under the Company's non-equity incentive award plans, as shown in the Summary Compensation Table above.
(4) The amount shown is the market value of equity awards held by the Named Officer at December 31, 2018. Under the terms of the Amended and Restated 2016 Management Equity Incentive Plan, equity awards vest early upon a change in control or upon termination of employment due to death, disability or retirement under a Company retirement plan.
(5) Represents the present value of the Named Officer's accumulated benefits under the Company's defined benefit retirement plans described above. The increase in present value for termination following a change in control results from the plans' provisions for a lump sum payment upon termination of employment within two years after a change in control. The values upon death reflect survivor benefits.
(6) Represents the balances at December 31, 2018 in the Named Officer's accounts under the Company's qualified and nonqualified defined contribution plans.

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(7) The Company has a nondiscriminatory plan available generally to United States salaried employees which provides medical benefits to employees who retire under the Company's Pension Plan until they become eligible for Medicare benefits. The amount shown in the table represents the estimated cost of providing plan benefits to the Named Officer. This plan was closed to new participants effective January 1, 2010.
(8) The amount shown for death represents the present value of the cost of continued dependent medical care coverage under the Company's health and welfare plan. The amount shown for disability is the present value of the cost of continued medical care coverage for the Named Officer and dependents. The amount shown for change in control is the estimated cost to the Company of continuation for 24 months of medical, dental, accident and life insurance benefits, as required by the Change in Control Severance Agreements described below.
(9) The amounts payable on death are the death benefits under the Company's group term life insurance policy and an individual life insurance policy, which is payable by the insurer.

## Steven C. Blanco

The following table shows the payments and benefits to which Steven C. Blanco would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the table:

|  | Voluntary termination |  | Involuntary termination for cause |  | Involuntary termination without cause |  | Death |  | Disability | Change in control termination |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash severance (1) | \$ | - | \$ | - | \$ | 95,000 | \$ | - | \$ |  | 1,155,401 |
| Disability income (2) | \$ | - | \$ | - | \$ | - | \$ | - | \$2,220,694 | \$ | - |
| Earned award under non-equity incentive plans (3) | \$ | 315,202 | \$ | - | \$ | 315,202 | \$ | 315,202 | \$ 315,202 | \$ | 315,202 |
| Equity (4): |  |  |  |  |  |  |  |  |  |  |  |
| Restricted stock | \$ | - | \$ | - | \$ | - | \$ | 287,995 | \$ 287,995 | \$ | 287,995 |
| Unexercisable Options | \$ | - | \$ | - | \$ | - | \$ | 432,551 | \$ 432,551 | \$ | 432,551 |
| Performance Award | \$ | - | \$ | - | \$ | - | \$ | 936,666 | \$ 936,666 | \$ | 936,666 |
| Retirement benefits: |  |  |  |  |  |  |  |  |  |  |  |
| Defined benefit plans (5) |  |  |  |  |  |  |  |  |  |  |  |
| Pension Plan | \$ | 148,195 | \$ | 148,195 | \$ | 148,195 | \$ | 67,045 | \$ 148,195 | \$ | 148,195 |
| Supplemental Pension Plan | \$ | 157,783 | \$ | 157,783 | \$ | 157,783 | \$ | 71,310 | \$ 157,783 | \$ | 160,442 |
| Supplemental Executive Retirement Plan | \$ | - | \$ | - | \$ | - | \$ | - | \$ | \$ |  |
| Defined contribution plans (6) |  |  |  |  |  |  |  |  |  |  |  |
| 401(k) Retirement Savings Plan | \$ | 256,946 | \$ | 256,946 | \$ | 256,946 | \$ | 256,946 | \$ 256,946 | \$ | 256,946 |
| Supplemental Savings Plan | \$ | 154,594 | \$ | 154,594 | \$ | 154,594 | \$ | 154,594 | \$ 154,594 | \$ | 154,594 |
| Retiree medical (7) | \$ | - | \$ | - | \$ | - | \$ | - | \$ - | \$ | - |
| Other Benefits: |  |  |  |  |  |  |  |  |  |  |  |
| Health \& Welfare (8) | \$ | - | \$ | - | \$ | - | \$ | 41,010 | \$ 264,339 | \$ | 12,260 |
| Insurance benefits (9) | \$ | - | \$ | - | \$ | - | \$ | 500,000 | \$ - | \$ | - |
| Outplacement assistance | \$ | - | \$ | - | \$ | 25,000 | \$ | - | \$ - | \$ | 25,000 |
| Total |  | 1,032,721 | \$ | 717,519 | \$ | 1,152,721 |  | ,063,320 | \$5,174,966 |  | 3,885,253 |

(1) Represents the cash severance amount payable under the MSA Salaried Severance Pay Plan or the Change in Control Severance Agreements described below.
(2) Represents the present value of the future payments that should be payable under the terms of the Company's long-term disability plan, which provides an annual benefit of $60 \%$ of salary up to a maximum annual benefit of $\$ 360,000$.
(3) Represents the amount earned through completion of the plan year under the Company's non-equity incentive award plans, as shown in the Summary Compensation Table above.
(4) The amount shown is the market value of equity awards held by the Named Officer at December 31, 2018. Under the terms of the Amended and Restated 2016 Management Equity Incentive Plan, equity awards vest early upon a change in control or upon termination of employment due to death, disability or retirement under a Company retirement plan.
(5) Represents the present value of the Named Officer's accumulated benefits under the Company's defined benefit retirement plans described above. The increase in present value for termination following a change in control results from the plans' provisions for a lump sum payment upon termination of employment within two years after a change in control. The values upon death reflect survivor benefits.
(6) Represents the balances at December 31, 2018 in the Named Officer's accounts under the Company's qualified and nonqualified defined contribution plans.

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(7) The Company has a nondiscriminatory plan available generally to United States salaried employees which provides medical benefits to employees who retire under the Company's Pension Plan until they become eligible for Medicare benefits. The amount shown in the table represents the estimated cost of providing plan benefits to the Named Officer. This plan was closed to new participants effective January 1, 2010.
(8) The amount shown for death represents the present value of the cost of continued dependent medical care coverage under the Company's health and welfare plan. The amount shown for disability is the present value of the cost of continued medical care coverage for the Named Officer and dependents. The amount shown for change in control is the estimated cost to the Company of continuation for 24 months of medical, dental, accident and life insurance benefits, as required by the Change in Control Severance Agreements described below.
(9) The amounts payable on death are the death benefits under the Company's group term life insurance policy and an individual life insurance policy, which is payable by the insurer.

## Douglas K. McClaine

The following table shows the payments and benefits to which Douglas K. McClaine would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the table:

|  | Voluntary termination | Involuntary termination for cause |  | voluntary rmination hout cause | Death | Disability | Change in control termination |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash severance (1) | \$ | \$ | \$ | 390,000 | \$ | \$ | \$ 1,827,330 |
| Disability income (2) | \$ | \$ | \$ | - | \$ | \$ 861,685 | \$ |
| Earned award under non-equity incentive plans (3) | \$ 244,156 | \$ | \$ | 244,156 | \$ 244,156 | \$ 244,156 | \$ 244,156 |
| Equity (4): |  |  |  |  |  |  |  |
| Restricted stock | \$ - | \$ | \$ | - | \$ - | \$ | \$ |
| Unexercisable Options | \$ 713,552 | \$ | \$ | 713,552 | \$ 713,552 | \$ 713,552 | \$ 713,552 |
| Performance Award | \$ 2,735,945 | \$ | \$ | 2,735,945 | \$2,735,945 | \$ 2,735,945 | \$ 2,735,945 |
| Retirement benefits: |  |  |  |  |  |  |  |
| Defined benefit plans (5) |  |  |  |  |  |  |  |
| Pension Plan | \$ 1,219,493 | \$ 1,219,493 | \$ | 1,219,493 | \$1,028,837 | \$ 1,219,493 | \$ 1,219,493 |
| Supplemental Pension Plan | \$ 1,579,101 | \$ 1,579,101 | \$ | 1,579,101 | \$1,331,432 | \$ 1,579,101 | \$ 1,550,159 |
| Supplemental Executive Retirement Plan | \$ 450,635 | \$ 450,635 | \$ | 450,635 | \$ 450,635 | \$ 450,635 | \$ 600,000 |
| Defined contribution plans (6) |  |  |  |  |  |  |  |
| 401(k) Retirement Savings Plan | \$ 1,732,577 | \$ 1,732,577 | \$ | 1,732,577 | \$1,732,577 | \$ 1,732,577 | \$ 1,732,577 |
| Supplemental Savings Plan | \$ 586,541 | \$ 586,541 | \$ | 586,541 | \$ 586,541 | \$ 586,541 | \$ 586,541 |
| Retiree medical (7) | \$ 178,189 | \$ 178,189 | \$ | 178,189 | \$ | \$ | \$ 178,189 |
| Other Benefits: |  |  |  |  |  |  |  |
| Health \& Welfare (8) | \$ | \$ | \$ | - | \$ 80,205 | \$ 178,189 | \$ |
| Insurance benefits (9) | \$ | \$ | \$ | - | \$ 700,000 | \$ | \$ |
| Outplacement assistance | \$ - | \$ - | \$ | 25,000 | \$ - | \$ - | \$ 25,000 |
| Total | \$ 9,440,189 | \$ 5,746,536 | \$ | 9,855,189 | \$9,603,880 | \$10,301,874 | \$ 11,412,942 |

(1) Represents the cash severance amount payable under the MSA Salaried Severance Pay Plan or the Change in Control Severance Agreements described below.
(2) Represents the present value of the future payments that should be payable under the terms of the Company's long-term disability plan, which provides an annual benefit of $60 \%$ of salary up to a maximum annual benefit of $\$ 360,000$.
(3) Represents the amount earned through completion of the plan year under the Company's non-equity incentive award plans, as shown in the Summary Compensation Table above.
(4) The amount shown is the market value of equity awards held by the Named Officer at December 31, 2018. Under the terms of the Amended and Restated 2016 Management Equity Incentive Plan, equity awards vest early upon a change in control or upon termination of employment due to death, disability or retirement under a Company retirement plan. At December 31, 2018, Mr. McClaine was eligible to retire under the Company's pension plan.
(5) Represents the present value of the Named Officer's accumulated benefits under the Company's defined benefit retirement plans described above. The increase in present value for termination following a change in control results from the plans' provisions for a lump sum payment upon termination of employment within two years after a change in control. The values upon death reflect survivor benefits.
(6) Represents the balances at December 31, 2018 in the Named Officer's accounts under the Company's qualified and nonqualified defined contribution plans.

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(7) The Company has a nondiscriminatory plan available generally to United States salaried employees which provides medical benefits to employees who retire under the Company's Pension Plan until they become eligible for Medicare benefits. The amount shown in the table represents the estimated cost of providing plan benefits to the Named Officer. This plan was closed to new participants effective January 1, 2010.
(8) The amount shown for death represents the present value of the cost of continued dependent medical care coverage under the Company's health and welfare plan. The amount shown for disability is the present value of the cost of continued medical care coverage for the Named Officer and dependents.
(9) The amounts payable on death are the death benefits under the Company's group term life insurance policy and an individual life insurance policy, which is payable by the insurer. The amount payable under all other columns represents the death benefit after retirement under the Company's group term life insurance policy, which is payable by the insurer.

## Bob W. Leenen

The following table shows the payments and benefits to which Bob W. Leenen would have been entitled if his employment had terminated on December 31, 2018 for the reasons indicated in the table:

|  | Voluntary termination |  | Involuntary termination for cause |  | Involuntary termination without cause |  | Death | Disability |  | Change in control termination |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash severance (1) | \$ | - | \$ | - | \$ | 95,240 | \$ | \$ | - | \$ | 968,750 |
| Disability income (2) | \$ | - | \$ | - | \$ | - | \$ - |  | 3,050,018 | \$ | - |
| Earned award under non-equity incentive plans (3) | \$ | 288,729 | \$ | - | \$ | 288,729 | \$ 288,729 | \$ | 288,729 | \$ | 288,729 |
| Equity (4): |  |  |  |  |  |  |  |  |  |  |  |
| Restricted stock | \$ | - | \$ | - | \$ | - | \$ 224,741 | \$ | 224,741 | \$ | 224,741 |
| Unexercisable Options | \$ | - | \$ | - | \$ | - | \$ 95,011 | \$ | 95,011 | \$ | 95,011 |
| Performance Award | \$ | - | \$ | - | \$ | - | \$ 288,655 | \$ | 288,655 | \$ | 288,655 |
| Retirement benefits: |  |  |  |  |  |  |  |  |  |  |  |
| Defined benefit plans (5) |  |  |  |  |  |  |  |  |  |  |  |
| Pension Plan | \$ | 330,167 | \$ | 330,167 | \$ | 330,167 | \$ 0 | \$ | 330,167 | \$ | 330,167 |
| Supplemental Pension Plan | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Supplemental Executive Retirement Plan | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Defined contribution plans (6) |  |  |  |  |  |  |  |  |  |  |  |
| 401(k) Retirement Savings Plan | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Supplemental Savings Plan | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Retiree medical (7) | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Other Benefits: |  |  |  |  |  |  |  |  |  |  |  |
| Health \& Welfare (8) | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Insurance benefits (9) | \$ | - | \$ | - | \$ | - | \$ | \$ | - | \$ | - |
| Outplacement assistance | \$ | - | \$ | - | \$ | - | \$ - | \$ | - | \$ | - |
| Total | \$ | 618,896 | \$ | 330.167 | \$ | 714,136 | \$ 897,136 |  | 4,277,320 | \$ | 2,196,053 |

Total
cement assistance
(1) Represents the cash severance amount payable under the MSA Salaried Severance Pay Plan or the Change in Control Severance Agreements described below.
(2) Represents the present value of the future payments that should be payable under the terms of the Swiss Life Pension Plan, which provides an annual benefit of $60 \%$ of salary.
(3) Represents the amount earned through completion of the plan year under the Company's non-equity incentive award plans, as shown in the Summary Compensation Table above.
(4) The amount shown is the market value of equity awards held by the Named Officer at December 31, 2018. Under the terms of the Amended and Restated 2016 Management Equity Incentive Plan, equity awards vest early upon a change in control or upon termination of employment due to death, disability or retirement under a Company retirement plan.
(5) Represents the present value of the Named Officer's accumulated benefits under the Company's defined benefit retirement plans described above. The increase in present value for termination following a change in control results from the plans' provisions for a lump sum payment upon termination of employment within two years after a change in control. The values upon death reflect survivor benefits.
(6) Represents the balances at December 31, 2018 in the Named Officer's accounts under the Company's qualified and nonqualified defined contribution plans.

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(7) The Company has a nondiscriminatory plan available generally to United States salaried employees which provides medical benefits to employees who retire under the Company's Pension Plan until they become eligible for Medicare benefits. The amount shown in the table represents the estimated cost of providing plan benefits to the Named Officer. This plan was closed to new participants effective January 1, 2010.
 the present value of the cost of continued medical care coverage for the Named Officer and dependents. The amount shown for change in control is the estimated cost to the Company of continuation for 24 months of medical, dental, accident and life insurance benefits, as required by the Change in Control Severance Agreements described below.
(9) The amounts payable on death are the death benefits under the Company's group term life insurance policy and an individual life insurance policy, which is payable by the insurer.

## William M. Lambert

The following table shows the payments and benefits to which William M. Lambert was entitled when he retired on June 1, 2018:

| Cash severance | \$ | - |
| :---: | :---: | :---: |
| Disability income | \$ | - |
| Earned award under non-equity incentive plans | \$ | 393,446 |
| Equity: |  |  |
| Restricted stock | \$ | - |
| Unexercisable Options | \$ | - |
| Performance Award | \$ | 5,357,741 |
| Retirement benefits: |  |  |
| Defined benefit plans |  |  |
| Pension Plan | \$ | 1,150,701 |
| Supplemental Pension Plan | \$ | 6,664,543 |
| Supplemental Executive Retirement Plan | \$ | 729,552 |
| Defined contribution plans |  |  |
| 401(k) Retirement Savings Plan | \$ | 1,215,160 |
| Supplemental Savings Plan | \$ | 129,113 |
| Retiree medical | \$ | 109,421 |
| Other Benefits: |  |  |
| Health \& Welfare | \$ | - |
| Insurance benefits | \$ | - |
| Outplacement assistance | \$ | - |
| Total |  | 5,749,647 |

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## Kerry M. Bove

The following table shows the payments and benefits to which Kerry M. Bove was entitled when he retired on July 1, 2018:


## Salaried Severance Pay Plan

The Company has a severance plan which is available generally to United States salaried exempt employees and which does not discriminate in scope, terms or operation in favor of executive officers. Under this plan, an employee whose employment is involuntarily terminated without cause is entitled to a lump sum separation payment in an amount ranging from four weeks' base salary for an employee with less than one year of continuous service to 52 weeks' base salary for employees with 21 or more years of continuous service. The cash severance amount shown under "termination without cause" in the tables above is the amount to which the Named Officer would have been entitled under this plan had his employment been terminated without cause on December 31, 2018. A Named Officer would not receive payments under this plan if the termination qualified for severance benefits under the change in control severance agreements described below.

## Change in Control Severance Agreements

The Company has entered into agreements with each of the Named Officers the stated purpose of which is to encourage the officers' continued attention and dedication to their duties without distraction in the event of an actual or potential change in control of the Company. In the agreements, the officers agree that if a potential change in control, as defined in the agreements, occurs, the officers will remain in the employment of the Company for at least six months or until an actual change in control occurs, unless employment is sooner terminated by the executive for good reason, as defined in the agreement, or due to death, disability or retirement or by the Company. In return, the agreements provide that if within two years after a change in control, as defined in the agreement, the officer's employment is terminated by the Company without cause, as defined in the agreement, or the officer terminates his employment for good reason, as defined in the agreement, the officer will be entitled to receive:

- a lump sum payment equal to up to three times the sum of (i) the officer's annual salary, plus (ii) the average annual bonus paid to the officer for the preceding two years;


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- continuation for up to 36 months of medical, dental, accident and life insurance benefits; and
- 36 months additional service credit under the Company's Supplemental Executive Retirement Plan and post-retirement health care programs, for Named Officers who became officers prior to January 1, 2009.

The benefit periods described in the first two bullet points above were shortened to 24 months for officers first entering into change in control severance agreements on or after January 1, 2011.

Unlike many companies, the Company does not "gross-up" the benefits payable to officers for excise taxes. Instead, the benefits payable under the agreements are limited to the amount that can be paid without triggering any excise tax or rendering any amounts non-deductible under the Internal Revenue Code. The limitation would not apply if the reduced benefit is less than the unreduced benefit after payment of any excise tax.

The "change in control termination" column in the tables above shows the amounts of the payments and benefits each Named Officer would have received if a qualifying termination of employment following a change in control had occurred as of December 31, 2018.

## Pay Ratio Disclosure

We are providing the following information, as required by Item 402(u) of Regulation S-K:
For 2018, our last completed fiscal year:

- the median of the annual total compensation of all our employees (other than William M. Lambert, Chief Executive Officer, and Nishan J. Vartanian, Chief Executive Officer) was $\$ 55,834$; and
- the annual total combined compensation of William M. Lambert, Chief Executive Officer, and Nishan J. Vartanian, Chief Executive Officer or based on the Summary Compensation Table and adjusted as described below, was $\$ 4,762,023$.

Based on this information, the estimated ratio of the annual total compensation of our Chief Executive Officer to the median of the annual total compensation of all employees is approximately 85 to 1 .

To identify the median of the annual total compensation of all our employees, as well as to determine the annual total compensation of our median employee, the methodology and material assumptions, adjustments, and estimates used to identify the median and determine annual total compensation (or any elements of annual total compensation) were as follows:

1. As of October 31, 2018, our employee population consisted of approximately 5,050 individuals working at our parent company and consolidated subsidiaries.

We selected October 31, 2018, which is a date within the last three months of fiscal 2018, as the date we would use to identify our median employee. This allowed sufficient time to identify the median employee, given the global scope of our operations.
2. To find the median of the annual total compensation of all our employees (other than our Chief Executive Officer), we gathered year-to-date compensation data, through October 31, 2018 for all 5,050 individuals.
a) We used cash compensation paid during the period January 1, 2018 through October 31, 2018 including: base pay, overtime pay, sales incentive pay, and bonus incentive pay as the consistently applied compensation measure by which to determine the median employee.
b) In performing this calculation, we did not annualize the compensation of any employees who did not work for the Company or its consolidated subsidiaries for the entire fiscal year.
c) We did not make any cost-of-living adjustments in identifying the median employee.

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3. Using this methodology, we determined that our median employee was a full-time, hourly production employee located in our Jacksonville, North Carolina manufacturing facility with wages, bonus and overtime pay for the 10 -month period ending October 31,2018 in the amount of $\$ 34,578$.
4. With respect to our median employee, we then identified and calculated the elements of such employee's compensation for fiscal 2018 in accordance with the requirements of Item 402(c)(2)(x) of Regulation S-K, resulting in annual total compensation in the amount of $\$ 55,834$. The difference between such employee's wages, overtime pay and bonus incentive pay and the employee's annual total compensation represents the estimated value of such employee's other compensation, including company matching contributions to the MSA Retirement Savings plan and Company contributions to the medical insurance premium \$12,202.
5. With respect to the annual total compensation of our Chief Executive Officers, we used the amount reported in the "Total" column of the 2018 Summary Compensation Table included in this Proxy Statement, with the addition of Company paid contributions to health and welfare plans to the "All Other Compensation" field.

(1) Includes Company contributions to the MSA Retirement Savings Plan (401k) and for health and welfare benefit premiums

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## AUDIT COMMITTEE REPORT

The Audit Committee of the Board of Directors (the "Committee") assists the Board in fulfilling its oversight responsibilities relating to, among other things, the quality and integrity of the Company's financial reports and quarterly and annual financial statements. The Committee operates pursuant to a written charter which was approved by the Board and is available in the Corporate Governance section of the Company's website at www.MSAsafety.com. The Committee is comprised of four directors, each of whom is independent in accordance with the listing standards of the New York Stock Exchange and Securities and Exchange Commission Rule 10A-3. The Board has determined that director Garcia-Tunon, the chair of the Committee, and director Pearse, a member of the Committee, are each an "audit committee financial expert," as defined by the rules of the Securities and Exchange Commission.

The Committee is responsible for the appointment, compensation, and oversight of the Company’s external auditors, which for 2018 was Ernst \& Young LLP ("EY"), an independent registered public accounting firm, as well as for the selection of the lead audit partner. The independent registered public accounting firm is responsible for planning and carrying out an audit in accordance with generally accepted auditing standards and expressing an opinion based on the audit as to whether the Company's audited financial statements fairly present the Company's consolidated financial position, results of operation and cash flows in conformity with generally accepted accounting principles. The Committee received regular status update reports from EY on the overall scope and plan of its audit and discussed the key risk factors identified. The Committee performed an evaluation of EY performance and independence. Based on this assessment, and other factors, the Committee determined that its choice of external auditor is in the best interests of the Company and its shareholders.

The management of the Company is responsible for the preparation, presentation and integrity of the Company's financial statements and the adequacy of its internal controls. The Committee has reviewed the Company's audited financial statements for the year ended December 31, 2018 and has discussed the financial statements with management and with EY. The Audit Committee has received from EY written disclosures pursuant to Statement on Auditing Standards No. 61, Communication with Audit Committees, and has discussed those matters with EY. The Audit Committee has also received from EY the written disclosures and the letter required by the applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence, and has discussed with EY its independence. In performance of its oversight function, the Audit Committee also monitored Company management's compliance with Section 404 of the Sarbanes-Oxley Act of 2002 by discussing with management and EY (i) management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 ("Management's Assessment"); and (ii) EY's opinion of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2018.

Based upon the review and discussions described in this report, and subject to the limitations on the role and responsibilities of the Audit Committee as referred to in this report and described in the Committee's charter, the Audit Committee recommended to the Board that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 for filing with the Securities and Exchange Commission.

The foregoing report was submitted by the Audit Committee of the Board of Directors.

Alvaro Garcia-Tunon, Chair<br>Thomas W. Giacomini<br>Diane M. Pearse<br>Sandra Phillips Rogers

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## STOCK OWNERSHIP

Under regulations of the Securities and Exchange Commission, a person is considered the "beneficial owner" of a security if the person has or shares with others the power to vote the security (voting power) or the power to dispose of the security (investment power). In the tables which follow, "beneficial ownership" of the Company's stock is determined in accordance with these regulations and does not necessarily indicate that the person listed as a "beneficial owner" has an economic interest in the shares indicated as "beneficially owned."

## Beneficial Ownership of Management and Directors

The following table sets forth information regarding the amount and nature of beneficial ownership of the Company's Common Stock and $41 / 2 \%$ Cumulative Preferred Stock as of February 19, 2019 by each director and Named Officer and by all directors and executive officers as a group. Mr. Jordan was elected to the Board after the record date of February 19, 2019 and is not included in the table. Except as otherwise indicated in the footnotes to the table, the person named or a member of the group has sole voting and investment power with respect to the shares listed.

|  | Common Stock |  |  |  | 4 1/2\% Cumulative Preferred Stock |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount and Nature of Beneficial Ownership |  |  |  | Amount and Nature of Beneficial Ownership | PercentofClass |
|  | Non-Trust Shares <br> (1) | Trust Shares (2) | Total <br> Common Stock | Percent of Class <br> (1) |  |  |
| John T. Ryan III | 1,015,960(3) | 1,281,259(4) | 2,297,219 | 5.96\% | 187 | 1.02\% |
| Robert A. Bruggeworth | 31,225 | 5,738 | 36,963 | - | - | - |
| Alvaro Garcia-Tunon | 14,814 | - | 14,814 | - | - | - |
| Thomas W. Giacomini | 2,926 | - | 2,926 | - | - |  |
| William M. Lambert | 423,020(3) | - | 423,020 | 1.09\% | - | - |
| Diane M. Pearse | 42,096 | - | 42,096 | - | - | - |
| Rebecca B. Roberts | 9,598 | - | 9,598 | - | - |  |
| Sandra Phillips Rogers | 2,092 | - | 2,092 | - | - | - |
| L. Edward Shaw, Jr. | 512,030(3) | - | 512,030 | 1.33\% | - | - |
| William R. Sperry | - | - | - | - | - |  |
| Nishan J. Vartanian | 71,975(3) | - | 71,975 | - | - | - |
| Kenneth D. Krause | 26,646(3) | - | 26,646 | - | - | - |
| Steven C. Blanco | 37,935 | - | 37,935 | - | - | - |
| Bob W. Leenen | 4,921 | - | 4,921 | - | - | - |
| Douglas K. McClaine | 89,637 | - | 89,637 | - | - | - |
| Kerry M. Bove | 42,428 | - | 42,428 | - | - | - |
| All executive officers and directors as a group (15 persons) | 2,284,875(3) | 1,286,997(4) | 3,571,872 | 9.12\% | 187 | 1.02\% |
| (1) The number of shares of Common Stock beneficially Common Stock which may be acquired within 60 day Mr. Garcia-Tunon, 2,179 shares; Mr. Lambert, 343,74 shares; Mr. Leenen, 1,909 shares; Mr. McClaine, 55,7 beneficially owned and the number of shares of Comm days upon the vesting of restricted stock units granted shares; Mr. Leenen, 1,694 shares; Mr. McClaine, 8,94 beneficially owned also includes the following restric Mr. Garcia-Tunon, Ms. Pearse, Ms. Roberts, and Mr. executive officers as a group, 35,837 shares. Only per | mon Stock outs under the Man Shaw, 16,392 s directors and the percent of . Lambert, 51,1 directors and ex Director Equity mini, 2,926 sha | ng used in calc ent Equity Plan ; Mr. Vartanian tive officers as include the fol hares; Mr. Varta ive officers as ns, as to which Mr. Lambert, 1, | g the perce the Director 15 shares; oup, 528,54 ng shares of , 9,629 shar up, 87,385 persons hav hares; Ms. | class include ity Plans: Mr. Krause, 13,793 ares. The num mon Stock w Mr. Krause, 9,4 s. The numbe ting power on rs, 2,092 shar | ollowing share geworth, 11,5 es; Mr. Blanco f shares of Co may be acqui hares; Mr. Bla hares of Comn Mr. Ryan, Mr. and all directors | f <br> shares; <br> 2,820 <br> on Stock <br> within 60 <br> , 6,566 <br> Stock <br> ggeworth, <br> d |

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(2) The shares in this column are those as to which the director or officer holds voting and/or investment power as a fiduciary or otherwise under the terms of a trust instrument or a limited partnership agreement. In certain cases, the director or officer is also among the beneficiaries of the trust or the limited partnership.
(3) Includes shares of Common Stock as to which voting and investment power is shared with the spouse as follows: Mr. Krause, 1,215 shares; Mr. Vartanian, 8,272 shares; and all directors and executive officers as a group, 9,487 shares. The amount shown for Mr. Ryan does not include 256,021 additional shares of Common Stock held by Mr. Ryan's wife. The amount shown for Mr. Shaw does not include 477,672 additional shares of Common Stock, including 398,549 shares held as trustee, and 721 shares of $41 / 2 \%$ Cumulative Preferred Stock, held by Mr. Shaw's wife. The amounts shown for the following persons do not include shares held by their wives: Mr. Lambert, 60,600 shares; and Mr. Vartanian, 1,190 shares.
(4) Mr. Ryan acts as a co-trustee with shared voting and investment power with respect to such shares of Common Stock.

## 5\% Beneficial Owners

As of February 19, 2019, to the Company's knowledge, four persons or entities beneficially owned more than $5 \%$ of the Company's Common Stock. The beneficial ownership of John T. Ryan III appears in the immediately preceding table. The following table sets forth the beneficial ownership of the other $5 \%$ beneficial owners, based upon information provided by such persons:

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership | Percent of Class |
| :---: | :---: | :---: |
| BlackRock, Inc. |  |  |
| 55 East 52 ${ }^{\text {nd }}$ Street |  |  |
| New York, NY 10055 | 4,017,620(1) | 10.4\% |
| State Street Corporation |  |  |
| State Street Financial Center |  |  |
| One Lincoln Street |  |  |
| Boston, MA 02111 | 2,279,231(2) | 5.9\% |
| The Vanguard Group |  |  |
| 100 Vanguard Blvd. |  |  |
| Malvern, PA 19355 | 3,619,752(3) | 9.4\% |

(1) According to a Schedule 13G filed January 31, 2019, BlackRock, Inc. and its subsidiaries have sole voting power over 3,941,823 shares, and sole investment power over 4,017,620 shares of Common Stock.

(3) According to Schedule 13G filed February 11, 2019, The Vanguard Group and its subsidiaries have sole voting power over 70,979 shares, sole investment power over 3,547, 824 shares, shared According to Schedule 13 G filed February 11, 2019, The Vanguard Group and its
voting power over 4,500 shares and shared investment power over 71,928 shares.

## Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires that directors and officers of the Company and beneficial owners of more than $10 \%$ of its Common Stock file reports with the Securities and Exchange Commission with respect to change in their beneficial ownership of equity securities of the Company. Based solely upon a review of the copies of such reports furnished to the Company and written representations by certain persons that reports on Form 5 were not required, Mr. William Lambert had two late Form 4 filings.

## PROPOSAL NO. 2

## SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Because of the importance to the shareholders of having the Company's financial statements audited by an independent registered public accounting firm, it is the opinion of the Board that the selection of the independent registered public accounting firm should be submitted to the shareholders. The Board of Directors and its Audit Committee recommend that the shareholders approve the selection of the firm of Ernst \& Young LLP as the Company's independent registered public accounting firm for the year ending December 31, 2019. Ernst \& Young LLP has advised the Company that neither the firm nor any of its partners has any direct or material indirect financial interest in the Company or any of its subsidiaries.

The following table provides a summary of the Company's fees paid for the services of its auditor, Ernst \& Young LLP.

|  | 2018 |  |
| :--- | :---: | :---: |
| Audit Fees | $\$ 2,922,476$ | $\$ 2,535,600$ |
| Audit-Related Fees (1) | 114,100 |  |
| Tax Fees (2) | - |  |
| All Other Fees | - | 75,595 |

(1) Audit-related fees were primarily for employee benefit plan audits and various attest reports.
(2) Tax fees were for tax advice related to the Company's Irish subsidiary General Monitors Ireland Limited.

The charter of the Audit Committee requires that the Audit Committee approve in advance all audit and non-audit services to be performed by the Company's independent registered public accounting firm. All services provided by the independent registered public accounting firm were pre-approved by the Audit Committee pursuant to the pre-approval policy.

BOARD RECOMMENDATION AND REQUIRED VOTE
PROPOSAL NO. 2: SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
The Board of Directors and the Audit Committee recommend that you vote FOR the selection of Ernst \& Young LLP as the independent registered public accounting firm. Properly submitted proxies which are timely received will be so voted, unless otherwise directed thereon. It is expected that one or more representatives of Ernst \& Young LLP will be present at the Annual Meeting with the opportunity to make a statement, if they desire to do so, and to respond to appropriate questions. See Proposal No. 1 above, "Election of Directors," for information concerning the Audit Committee of the Board.

Approval of this proposal requires the affirmative vote of a majority of the votes cast (which excludes abstentions and failures to vote (e.g., broker non-votes)) by the holders of Common Stock present and voting in person or by proxy, with a quorum of a majority of the outstanding shares of Common Stock being present or represented at the Annual Meeting. In the event the proposal is not approved, the Board will treat this as a recommendation to consider another independent registered public accounting firm for 2020.

## PROPOSAL NO. 3

## ADVISORY VOTE TO APPROVE EXECUTIVE COMPENSATION

As described in the Compensation Discussion and Analysis and summarized in the "Executive Summary" thereto, the Compensation Committee of the Board has developed an executive compensation program designed to pay for performance and to align the long-term interests of our named executive officers with the long-term interests of our shareholders. The Company is presenting the following proposal, which gives shareholders the opportunity to endorse or not endorse the Company's compensation program for named executive officers by voting for or against the following resolution. This resolution is required pursuant to Section 14A of the Securities Exchange Act. While the Board intends to carefully consider the shareholder vote and feedback from this proposal, such vote will not be binding on the Board, nor will it create or imply any change in the fiduciary duties of, or impose any additional fiduciary duty on, the Company or the Board. The Board and the Compensation Committee will take into account the outcome when considering future executive compensation arrangements. The Board and management are committed to our shareholders and understand that it is useful and appropriate to obtain the views of our shareholders when considering the design and initiation of executive compensation programs. In 2018, the shareholders voted in favor of the Company's compensation program for named executive officers, with $99.2 \%$ of the votes cast by shareholders voting FOR the proposal. The Board and Compensation Committee took this vote into consideration in designing the compensation program for 2019. Please see the Compensation Discussion and Analysis above for further details.

RESOLVED, that the shareholders approve the compensation of the Company's named executive officers, pursuant to the executive compensation disclosure rules of the Securities and Exchange Commission, including as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related disclosure contained in the proxy statement set forth under the caption "Executive Compensation."

## BOARD RECOMMENDATION

## PROPOSAL NO. 3: ADVISORY VOTE TO APPROVE EXECUTIVE COMPENSATION

The Board of Directors and the Compensation Committee recommend that you vote FOR Proposal 3, approval of the compensation of our named executive officers as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related disclosure contained in this proxy statement set forth under the caption "Executive Compensation." Properly submitted proxies which are timely received will be voted FOR approval of the proposal, unless otherwise directed thereon.

## OTHER MATTERS

The Board of Directors does not know of any matters, other than those referred to herein, which will be presented for action at the meeting. However, in the event of a vote on any other matter that should properly come before the meeting, it is intended that proxies received in the accompanying form will be voted thereon in accordance with the discretion and judgment of the persons named in the proxies.

## ANNUAL REPORT ON FORM 10-K

Upon written request to the undersigned Secretary of the Company (at the address specified on page one) by any shareholder whose proxy is solicited hereby, the Company will furnish a copy of its 2018 Annual Report on Form 10-K to the Securities and Exchange Commission, together with financial statements and schedules thereto, without charge to the shareholder requesting same.

## 2020 SHAREHOLDER PROPOSALS

The Company's bylaws require that any shareholder intending to present a proposal for action at an Annual Meeting must give written notice of the proposal, containing specified information, so that it is received by the Company not later than the notice deadline under the bylaw. This notice deadline will generally be 120 days prior to the anniversary date of the Company's Proxy Statement for the previous year's Annual Meeting, or December 10, 2019 for the Company's Annual Meeting in 2020.

The bylaw described above does not affect the right of a shareholder to request inclusion of a shareholder proposal in the Company's Proxy Statement pursuant to Securities and Exchange Commission Rule 14a-8 or to present for action at an Annual Meeting any proposal so included. Rule 14a-8 requires that written notice of a shareholder proposal requested to be included in the Company's proxy materials pursuant to the Rule must also generally be received by the Company not later than 120 days prior to the anniversary date of the Company's Proxy Statement for the previous year's Annual Meeting. For the Company's Annual Meeting in 2020, this deadline would also be December 10, 2019.

The notices of shareholder proposals described under this caption must be given to the Secretary of the Company at the address set forth on page one. A copy of the bylaw provision described above will be furnished to any shareholder upon written request to the Secretary at the same address.

## SHAREHOLDER COMMUNICATIONS

A shareholder or other interested party who wishes to communicate with the Board, a Committee of the Board or any individual director or group of directors may do so directly by sending the communication in writing, addressed to the Board, the Committee, the individual director or group of directors, c/o Corporate Secretary, at the Company's address appearing on page one.

## EXPENSES OF SOLICITATION

All expenses incident to the solicitation of proxies by the Board of Directors will be paid by the Company. The Company will, upon request, reimburse brokerage houses and other custodians, nominees and fiduciaries for reasonable out-of-pocket expenses incurred in forwarding copies of solicitation material to beneficial owners of Common Stock held in the names of such persons. In addition to solicitation by mail, in a limited number of instances, regular employees of the Company may solicit proxies in person or by telephone. Employees will receive no additional compensation for any such solicitation.

By Order of the Board of Directors,

Douglas K. MCClaine
Secretary

MSA SAFETY INCORPORATED
1000 CRANBERRY WOODS DRIVE
CRANBERRY TOWNSHIP, PA 16066

VOTE BY INTERNET - www.proxyvote.com
Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on May 16, 2019. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

## VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to vote your proxy until 11:59 P.M. Eastern Time on May 16, 2019. Have your proxy card in hand when you call and then follow the instructions.

## VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

| The Board of Directors recommends you vote FOR the following: | $\begin{gathered} \text { For } \\ \text { All } \end{gathered}$ | Withhold All | For All <br> Except | To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below. |
| :---: | :---: | :---: | :---: | :---: |
| 1. Election of Directors for a term expiring in 2022. | $\square$ | $\square$ | $\square$ |  |
| Nominees |  |  |  |  |
| 01 Robert A. Bruggeworth |  |  |  |  |
| 02 Gregory B. Jordan |  |  |  |  |
| 03 Rebecca B. Roberts |  |  |  |  |
| 04 William R. Sperry |  |  |  |  |

The Board of Directors recommends you vote FOR proposals 2 and 3.


NOTE: Such other business as may properly come before the meeting or any adjournment thereof. For address change/comments, mark here. $\square$
(see reverse for instructions)
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer.


## Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Annual Report to Shareholders, Notice of Annual Meeting and Proxy Statement are available at www.proxyvote.com.

## MSA SAFETY INCORPORATED

Annual Meeting of Shareholders
Friday, May 17, 2019 at 9:00 AM
This proxy is solicited by the Board of Directors
The undersigned hereby appoints NISHAN J. VARTANIAN and DOUGLAS K. McCLAINE, or either of them, as proxies, with power of substitution, to vote all shares of MSA SAFETY INCORPORATED which the undersigned is entitled to vote at the 2019 Annual Meeting of Shareholders and any adjournment thereof:

This proxy will be voted as directed, or, if no direction is given, FOR items 1,2 , and 3 . A vote FOR item 1 includes discretionary authority to vote for a substitute if a nominee listed becomes unable or unwilling to serve.

The proxies named are authorized to vote in their discretion upon such other matters as may properly come before the meeting or any adjournment thereof.

The undersigned hereby revokes all previous proxies for such Annual Meeting, acknowledges receipt of the Notice of Annual Meeting and Proxy Statement, and ratifies all that said proxies may do by virtue hereof.

PLEASE MARK, DATE, EXECUTE AND RETURN THIS PROXY PROMPTLY IN THE ENCLOSED ENVELOPE.
Address change / comments:
(If you noted any Address Changes and/or Comments above, please mark corresponding box on the reverse side.)
Continued and to be signed on reverse side


[^0]:    William R. Sperry, Senior Vice President and Chief Financial Officer of Hubbell Incorporated since 2012; prior thereto, Mr. Sperry was Vice President, Corporate Strategy and Development and Head of Investor Relations of Hubbell Incorporated. Prior to his roles with Hubbell Incorporated, Mr. Sperry held various roles in the investment banking, financial services and consulting industries.
    Qualifications: As the Chief Financial Officer of a publicly traded international corporation, and as a former investment banking executive, Mr. Sperry has broad experience in overseeing a large international business, along with specific expertise in mergers and acquisitions, corporate governance and risk management.

