



QUANTUM
TECHNOLOGIES



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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

**Notice of Annual Meeting of Stockholders
To Be Held on July 25, 2013**

Quantum Fuel Systems Technologies Worldwide, Inc. (the "Company") will hold an Annual Meeting of Stockholders ("Annual Meeting") at our offices at 25242 Arctic Ocean Drive, Lake Forest, California 92630 on July 25, 2013 at 1:30 p.m. PDT, or at any adjournment or postponement thereof. A Proxy Statement and Proxy Card are enclosed with this Notice of Annual Meeting of Stockholders.

We are holding this Annual Meeting for the following purposes, as more fully described in the Proxy Statement:

1. To elect two Class III directors to our Board of Directors to serve until the 2016 annual meeting of stockholders, or until their successors are duly elected and qualified;
2. To ratify the appointment of Haskell & White LLP as our independent auditors for our year ending December 31, 2013;
3. To authorize the Board of Directors, without further action of the stockholders, to amend the Company's Amended and Restated Certificate of Incorporation to implement a reverse stock split of the Company's common stock, \$0.02 par value, at a ratio within the range of 1-for-2 to 1-for-5 at any time prior to July 31, 2013;
4. To approve, in an advisory and non-binding vote, the compensation of the Company's named executive officers;
5. To authorize an adjournment of the Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposal 3; and
6. To transact such other business as may properly come before the Annual Meeting or any postponement or adjournment thereof.

Each of the proposals discussed above is described more fully in the accompanying proxy materials. We encourage you to read these materials carefully.

Only stockholders of record at the close of business on May 28, 2013 are entitled to notice of and to vote at the Annual Meeting and any adjournment thereof.

Your vote is very important. Whether or not you plan to attend the Annual Meeting, we urge you to vote as soon as possible to ensure that your shares are represented at the Annual Meeting. You may vote by Internet, telephone or mail, as fully described beginning on Page 1 of the attached Proxy Statement. You may revoke your proxy at any time. If you attend the Annual Meeting in person, you may revoke your proxy and vote in person if you wish. If your shares are held in the name of a broker, trust, bank, or other nominee, you will need to bring a proxy or letter from that broker, trust, bank or nominee that confirms that you are the beneficial owner of those shares.

By Order of the Board of Directors,

/s/ Kenneth R. Lombardo

Kenneth R. Lombardo
Corporate Secretary

Lake Forest, California

June 11, 2013

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY OF PROXY MATERIALS
FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JULY 25, 2013:**

The Company's Notice of Annual Meeting of Stockholders, Proxy Statement for the Annual Meeting, and 2013 Annual Report to Stockholders are available online at <https://materials.proxyvote.com>.



QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
25242 Arctic Ocean Drive
Lake Forest, California 92630

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QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
25242 Arctic Ocean Drive
Lake Forest, California 92630

PROXY STATEMENT

Annual Meeting of Stockholders
To Be Held on July 25, 2013

INFORMATION REGARDING PROXIES

General

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors (the "Board of Directors" or "Board") of Quantum Fuel Systems Technologies Worldwide, Inc. (the "Company") for use at the annual meeting of stockholders ("Annual Meeting") to be held on July 25, 2013 at 1:30 p.m. PDT at our offices at 25242 Arctic Ocean Drive, Lake Forest, California 92630, and at any adjournment or postponement thereof. The proposals presented in this Proxy Statement will be considered by stockholders at the Annual Meeting. This Proxy Statement and form of Proxy Card are being first made available to stockholders on or about June 11, 2013. The Company will pay the expenses of solicitation of proxies. Solicitation will be by mail. We will request banks and brokers to solicit proxies from their customers and will reimburse those banks and brokers for reasonable out-of-pocket costs for this solicitation. We may conduct further solicitation personally, telephonically or by facsimile through our officers, directors and employees, none of whom will receive additional compensation for assisting with the solicitation. We have engaged The Proxy Advisory Group, LLC to assist in the solicitation of proxies and provide related advice and informational support, for a service fee and the reimbursement of customary disbursements that are not expected to exceed \$10,000 in the aggregate.

As permitted by rules adopted by the Securities and Exchange Commission (the "SEC"), the Company is making this Proxy Statement and its 2013 Annual Report to Stockholders ("Annual Report") available to stockholders electronically via the Internet. We believe that this approach allows us to provide our stockholders with the information they need, while making the proxy distribution process more efficient, lowering costs and lessening the environmental impact of our Annual Meeting. On June 11, 2013, we mailed to stockholders a Notice of Internet Availability of Proxy Materials ("Notice of Internet Availability") containing instructions on how to access this Proxy Statement and our Annual Report and vote over the Internet. You will not receive a printed copy of the proxy materials in the mail, unless specifically requested. Instead, the Notice of Internet Availability instructs you on how to access and review over the Internet all of the important information contained in the Proxy Statement and Annual Report. The Notice of Internet Availability also instructs you on how you may submit your proxy over the Internet. If you would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials included in the Notice of Internet Availability.

Record Date, Issued and Outstanding Shares

Our Board of Directors has fixed the close of business on May 28, 2013 as the record date ("Record Date") for the Annual Meeting. Only stockholders of record as of that date are entitled to notice of and to vote at the Annual Meeting or any adjournment thereof. As of the Record Date, there were 56,815,761 shares of our common stock issued and outstanding, which includes 49,998 shares of our Series B non-voting common stock. As such, the holders of common stock are entitled to 56,765,763 votes in connection with the Annual Meeting.

Quorum Requirement

The holders of shares representing a majority of the voting power of the outstanding shares of common stock entitled to vote at the Annual Meeting must be present in person or represented by proxy in order for there to be a quorum. If the shares present, in person and by proxy, do not constitute the required quorum, the Annual Meeting may be adjourned to a subsequent

date for the purpose of obtaining a quorum. For purposes of determining if a quorum is present, abstentions and “broker non-votes” will be treated as shares that are present and entitled to vote at the Annual Meeting.

Voting and Proxies

The holders of common stock are entitled to one vote per share on any proposal presented at the Annual Meeting. Only stockholders of record at the close of business on the Record Date are entitled to notice of and to vote at the Annual Meeting and any adjournment thereof. Whether you hold shares directly as the stockholder of record or beneficially through a brokerage firm or financial institution, you may direct how your shares are voted without attending the Annual Meeting.

Voting Procedures for Record Holders

If on the Record Date your shares were registered directly in your name with our transfer agent, Broadridge Corporate Issuer Solutions, Inc., or if you have unvested restricted stock awards, then you are a stockholder of record and, accordingly, may vote in person at the Annual Meeting or, alternatively, you may vote by proxy. If you want to vote by proxy, there are three ways you may vote:

Via the Internet. You may vote at www.proxyvote.com, 24 hours a day, seven days a week. You will need the 12-digit control number included on your Notice of Internet Availability or your Proxy Card (if you received a printed copy of the proxy materials). Votes submitted through the Internet must be received by 11:59 p.m., Eastern Time, the day preceding the Annual Meeting.

By Telephone. You may vote using a touch-tone telephone by calling 1-800-690-6903, 24 hours a day, seven days a week. You will need the 12-digit control number included on your Notice of Internet Availability of Proxy Materials or your Proxy Card (if you received a printed copy of the proxy materials). Votes submitted by telephone must be received by 11:59 p.m., Eastern Time, the day preceding the Annual Meeting.

By Mail. If you received printed proxy materials, you may submit your vote by completing, signing, and dating each Proxy Card received and returning it in the prepaid envelope. Proxy cards submitted by mail must be received no later than the day preceding the Annual Meeting.

Voting Procedures for Shares Owned in Street Name

If on the Record Date your shares were held in an account at a brokerage firm or financial institution, which is commonly referred to as your shares being held in “street name,” then you are the beneficial owner of those shares and the brokerage firm or financial institution holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As the beneficial owner, you should have received a Notice of Internet Availability or voting instructions from the broker or other nominee holding your shares. You should follow the instructions in the Notice of Internet Availability or voting instructions provided by your broker or nominee in order to instruct your broker or other nominee on how to vote your shares. The availability of telephone and Internet voting will depend on the voting process of the broker or nominee. Shares held beneficially may be voted in person at our Annual Meeting only if you request and obtain a valid proxy or letter from the brokerage firm or financial institution that holds your account that confirms you are the beneficial owner of the shares.

Revocation of Proxy

Any proxy given pursuant to this solicitation may be revoked at any time before it is voted either by (i) filing with our Corporate Secretary a written notice of revocation which must be dated later than the date of the proxy being revoked, (ii) duly executing a subsequent proxy with a later date than the previously delivered proxy and delivering it to our Corporate Secretary, or (iii) attending the Annual Meeting and voting in person. If your shares are held in “street name,” you will need to bring a proxy or letter from the broker or other nominee that holds your account that confirms that you are the beneficial owner of those shares. Any written notice of revocation or subsequent proxy should be sent to the attention of our Corporate Secretary at 25242 Arctic Ocean Drive, Lake Forest, CA 92630.

Broker Non-Votes

The NYSE has rules that govern brokers who have record ownership of listed company stock (including stock such as ours that is listed on The NASDAQ Capital Market) held in brokerage accounts for their clients who beneficially own the shares. Under these rules, brokers who do not receive voting instructions from their clients have the discretion to vote uninstructed shares on certain matters (“routine matters”), but do not have the discretion to vote uninstructed shares as to certain other matters (“non-routine matters”). A “broker non-vote” occurs when a broker has not received voting instructions from a beneficial owner on a non-routine matter and therefore cannot vote such beneficial owner’s shares on the matter. Under NYSE interpretations, Proposal 1 (election of directors) and Proposal 4 (advisory vote on executive compensation) are considered non-routine matters.

However, since broker non-votes are not counted in any vote requiring a plurality of votes cast (Proposal 1) or a majority of the votes present in person or represented by proxy and entitled to vote (Proposal 4), broker non-votes will have no effect on the outcome of either of these proposals. We believe that Proposal 2 (ratification of auditors), Proposal 3 (amendment to certificate of incorporation) and Proposal 5 (adjournment of Annual Meeting) are considered routine matters and, thus, we do not expect to receive any broker non-votes on these proposals.

Votes Required

Directors are elected by a plurality of the votes of the shares of common stock represented and voted at the Annual Meeting. If you withhold your vote for a particular nominee, then your vote will not count "FOR" such nominee. Broker non-votes will not be treated as votes cast with respect to the election of directors, and thus, will have no effect on the outcome of Proposal 1, the election of directors.

Approval of Proposals 2, 4 and 5 requires the affirmative "FOR" vote of a majority of the shares present in person or by proxy and entitled to vote at the Annual Meeting. Abstentions will be counted toward the tabulation of votes cast and, therefore, will have the same effect as a negative vote. Broker non-votes will have no effect on the outcome of the votes. The advisory vote on executive compensation (Proposal 4) is non-binding on the Board of Directors.

Approval of Proposal 3 requires the affirmative "FOR" vote of a majority of all of our outstanding stock entitled to vote as of the Record Date. Abstentions and broker non-votes will have the same effect as a negative vote on this proposal.

Proxies received with no election marked will be voted in accordance with the Board of Director's recommendation for each proposal.

No matter currently is expected to be considered at the Annual Meeting other than the Proposals described above. If any other matters are properly brought before the Annual Meeting for action, it is intended that the persons named in the proxy and acting thereunder will vote in accordance with their discretion on such matters.

PROPOSAL 1
ELECTION OF DIRECTORS

Our Amended and Restated Certificate of Incorporation, as amended (“Certificate of Incorporation”), gives our Board of Directors the authority to fix, from time to time, the size of our Board; provided that, the number shall not be less than four nor more than eleven. The size of our Board is currently fixed at six members. In accordance with our Certificate of Incorporation and Amended and Restated Bylaws (“Bylaws”), the terms of office of our Board of Directors are divided into three classes as nearly equal in size as possible with staggered three-year terms: Class I, whose term will expire at our 2014 annual meeting, Class II, whose term will expire at the 2015 annual meeting, and Class III, whose term will expire at the 2013 annual meeting. Our Class I directors are Paul E. Grutzner and Brian A. Runkel; our Class II directors are G. Scott Samuelsen and Jonathan Lundy; and our Class III directors are W. Brian Olson and Carl E. Sheffer. On December 17, 2012, upon the recommendation of the Nominating and Governance Committee, the Board appointed Mr. Olson as a Class III director to fill a newly created vacancy. Mr. Sheffer was a member of Class I until February 6, 2013, when he was reassigned to Class III, whose term will expire at the annual meeting. The Board reassigned Mr. Sheffer to Class III, with his consent, in order to rebalance the three classes, as nearly equal in number as possible in accordance with our Certificate of Incorporation and Bylaws.

At each annual meeting of stockholders, the successors to the directors whose terms will then expire are elected to serve from the time of their election and qualification until the third annual meeting following their election or until their successors have been duly elected and qualified, or until their earlier resignation or removal. The classification of our Board of Directors could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, control of our company.

Voting Information

Although our Board of Directors anticipates that each nominee will be available to serve as a director, if any does not accept the nomination, or is otherwise unwilling or unable to serve, our Board may take one of the following actions: recommend a substitute nominee, in which case your proxy will be voted FOR the substitute nominee, reduce the number of directors to eliminate the vacancy, or fill the vacancy at a later date in accordance with our Bylaws.

A stockholder submitting a proxy may only vote on the nominees named in this Proxy Statement for election to our Board of Directors. Directors are elected by a plurality of votes. Abstentions and broker non-votes, while included for purposes of satisfying the quorum requirement for the Annual Meeting, will have no effect on the vote. The persons designated in the enclosed proxy will vote your shares FOR each nominee unless instructions otherwise are indicated in the enclosed proxy.

Information About Directors and Nominees for Election

Below is the name and age of each nominee standing for election at the Annual Meeting and for each of our other directors, the year in which each first became a director, his principal occupation and certain other pertinent information:

Nominees for Election for a Term Continuing Until the 2016 Annual Meeting

W. Brian Olson, age 49, has served as our President and Chief Executive Officer since May 2012, and was appointed to our Board of Directors on December 17, 2012. Prior to his appointment as our President and Chief Executive Officer, Mr. Olson had served as our Chief Financial Officer and Treasurer since August 2002. From July 1999 to August 2002, Mr. Olson served as Treasurer, Vice President and Chief Financial Officer of IMPCO Technologies, Inc.. He originally joined IMPCO in October 1994 where he held various financial positions, including serving as Corporate Controller. Prior to joining IMPCO, Mr. Olson was with the public accounting firm of Ernst & Young LLP and its Kenneth Leventhal Group. Mr. Olson holds a B.S. degree in business and operations management from Western Illinois University and an M.B.A. degree in finance and economic policy from the University of Southern California. Mr. Olson is a Certified Financial Manager and a Certified Management Accountant.

Carl E. Sheffer, age 67, has served as one of our directors since March 2005. Mr. Sheffer is President of Sheffer Enterprises, LLC, a consulting organization focused on the automotive industry, and has over 40 years of experience in the automotive industry. Prior to forming Sheffer Enterprises, Mr. Sheffer was Vice President, OEM Relations, for the Specialty Equipment Market Association (“SEMA”). During his 8 1/2 years with SEMA, Mr. Sheffer was responsible for all of the association’s interactions with the original equipment manufacturers (OEMs), including trade show participation, technology transfer programs, new vehicle measuring sessions and various dealer relations initiatives. Between 1972 and 1999, Mr. Sheffer held a variety of roles in human resources management, manufacturing, public relations and public policy for General Motors

Corporation. Mr. Sheffer received a B.S. in business administration from Central Michigan University and a Master's degree from Oakland University.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE ELECTION OF THE NOMINEES PRESENTED IN THIS PROPOSAL 1.

Directors Whose Terms Continue Until the 2014 Annual Meeting

Paul E. Grutzner, age 47, has served as one of our directors since July 2005. Mr. Grutzner founded ClearPoint Financial, LLC, an independent pension consulting firm, in 2002, and currently serves as its Managing Partner. Prior to founding ClearPoint Financial, LLC, Mr. Grutzner held positions consulting on retirement plans with RBC Dain Rauscher and CIBC Oppenheimer. He received a B.S. in Agricultural Economics and Sociology from the University of Wisconsin, Madison.

Brian A. Runkel, age 51, has served as one of our directors since July 2002. Since 1993, Mr. Runkel has served as President of Runkel Enterprises, an environmental consulting firm. Mr. Runkel also serves as Executive Director of the California Environmental Business Council, a non-profit trade and business association representing the California environmental technology and services industries. He received a B.A. in International Relations from George Washington University, and a J.D. from Harvard Law School.

Directors Whose Terms Continue Until the 2015 Annual Meeting

G. Scott Samuelsen, age 70, has served as one of our directors since July 2002. Since 1970, Dr. Samuelsen has been a professor at the University of California, Irvine, and is currently a Professor of Mechanical, Aerospace and Environmental Engineering, Henry Samueli Endowed Chair, and serves as the Director of the National Fuel Cell Research Center, the UCI Combustion Laboratory, and the Advanced Power and Energy Program. He also serves as a co-Chair of the California Stationary Fuel Cell Collaborative, and a Fellow of the American Society of Mechanical Engineers. Dr. Samuelsen received B.S., M.S. and Ph.D. degrees in Mechanical Engineering from the University of California, Berkeley.

Jonathan Lundy, age 49, was appointed to our Board of Directors on April 16, 2010 in connection with our acquisition of Schneider Power Inc. In August 2012, Mr. Lundy was appointed as our non-executive Chairman of the Board. Mr. Lundy is Senior Vice President, General Manager WOU, Atomic Energy of Canada Limited ("AECL"), a full service nuclear energy company. Prior to his joining AECL, from October 2011 to January 2012, Mr. Lundy served as Chief Restructuring Officer of ATS Automation Inc. From September 2009 to October 2011, Mr. Lundy served as AECL's Senior Vice President and General Counsel. From June 2008 to August 2009, Mr. Lundy served as Chief Executive Officer of our subsidiary, Schneider Power Inc. From October 2000 to May 2007, Mr. Lundy served respectively as General Counsel, and then President, Power and Generation, for Hydrogenics Corporation, a developer and manufacturer of fuel cell and electrolyzer technologies. Mr. Lundy has a BA and LLB from the University of Western Ontario. Mr. Lundy was a director of Schneider Power from August 2008 to April 2010.

Information about our Executive Officers

Our executive officers as of December 31, 2012, and their respective ages and positions were as follows:

| <u>Name</u> | <u>Age</u> | <u>Position</u> |
|---------------------|------------|--|
| W. Brian Olson | 49 | President; Chief Executive Officer; Director |
| Bradley J. Timon | 49 | Chief Financial Officer; Treasurer |
| Mark Arold | 48 | Vice President - Drive Systems |
| David Mazaika | 49 | Executive Director of Strategic Development |
| Kenneth R. Lombardo | 47 | Vice President - Legal; General Counsel; Corporate Secretary |
| Thorin Southworth | 38 | Corporate Controller |

W. Brian Olson, age 49, has served as our President and Chief Executive Officer since May 2012, and was appointed to our Board of Directors on December 17, 2012. Prior to his appointment as our President and Chief Executive Officer, Mr. Olson had served as our Chief Financial Officer and Treasurer since August 2002. From July 1999 to August 2002, Mr. Olson served as Treasurer, Vice President and Chief Financial Officer of IMPCO Technologies, Inc.. He originally joined IMPCO in October 1994 where he held various financial positions, including serving as Corporate Controller. Prior to joining IMPCO, Mr. Olson was with the public accounting firm of Ernst & Young LLP and its Kenneth Leventhal Group. Mr. Olson holds a B.S. degree in

business and operations management from Western Illinois University and an M.B.A. degree in finance and economic policy from the University of Southern California. Mr. Olson is a Certified Financial Manager and a Certified Management Accountant.

Bradley J. Timon, age 49, has served as our Chief Financial Officer and Treasurer since May 10, 2012. Prior to May 10, 2012, Mr. Timon served as our Corporate Controller and Chief Accounting Officer since April 2004. Prior to joining us, Mr. Timon worked as a financial consultant. From June 1998 to October 2001, Mr. Timon was with CORE, INC. serving as the Corporate Controller and then later as Acting Chief Financial Officer. Between September 1995 and May 1998, Mr. Timon served as a Controller for James Hardie Industries. Before entering private industry, Mr. Timon was with the public accounting firm KPMG from 1989 to 1995. Mr. Timon has a Bachelor of Arts degree in accounting from California State University, Fullerton and is a Certified Public Accountant (inactive status).

Mark Arold, age 48, was appointed to serve as Vice President of the Company's Drive Systems business unit. Mr. Arold has been with the Company since 2002 and had served as the Company's Director of Drive Systems Engineering since 2006. Mr. Arold received a Bachelor of Science in Mechanical Engineering degree and a Master of Science in Mechanical Engineering degree from Pennsylvania State University.

David M. Mazaika, age 49, has served as our Executive Director of Strategic Development since June 27, 2012. Prior to June 27, 2012, Mr. Mazaika served as our Chief Operating Officer since December 2008. Prior to joining us, Mr. Mazaika served as Chairman and CEO for ISE Corporation, a company which he co-founded in 1994. Prior to this, Mr. Mazaika was Vice President of Business Development for International Space Enterprises. From 1985 to 1993, Mr. Mazaika held senior positions with Convair and Space Systems Divisions of General Dynamics. Mr. Mazaika holds a Bachelor of Science in Electrical Engineering from Cornell University.

Kenneth R. Lombardo, age 47, has served as Vice President and General Counsel since May 2005 and became Corporate Secretary in September 2005. From March 1996 to May 2005, Mr. Lombardo practiced law at Kerr, Russell and Weber, PLC in Detroit, Michigan, where he specialized in mergers and acquisitions, taxation, corporate and business law. Mr. Lombardo is also a certified public accountant (inactive status) with over six years of audit and tax experience with Deloitte & Touche. Mr. Lombardo received his law degree from Wayne State University Law School and a Bachelor of Science degree in Business Administration, with a major in Accounting, from Central Michigan University.

Thorin Southworth, age 38, has served as our Corporate Controller since June 29, 2012. From August 2011 to June 2012, Mr. Southworth served as a division controller at Synchronous Aerospace Group. From May 2006 to August 2011, Mr. Southworth served in various capacities in the Company's accounting and finance group including as Assistant Controller. Mr. Southworth holds a Bachelor of Arts degree in accounting and finance from Pacific Lutheran University.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information about the beneficial ownership of each class of our securities as of May 20, 2013. It shows shares beneficially owned by each of the following:

- each person or group of affiliated persons known by us to beneficially own more than 5% of any class of our outstanding voting securities;
- each of our directors and nominees for director;
each of our named executive officers; and
- all current directors and executive officers as a group.
- We have determined the beneficial ownership shown in this table in accordance with the rules of the SEC. Under those rules, if a person held options or warrants to purchase shares of our common stock that were currently exercisable or exercisable within 60 days of May 20, 2013, those shares are included only in that person's reported holdings and in the calculation of their percentage ownership of our common stock. As a result, the beneficial ownership percentage of any person as shown in this table does not necessarily reflect the person's actual ownership or voting power with respect to the number of shares of common stock actually outstanding on May 20, 2013. Except as otherwise provided herein, the percentage of beneficial ownership is based on 56,765,763 shares of common stock as of May 20, 2013 and does not reflect the 49,998 shares of Series B nonvoting common stock that were outstanding on such date. General Motors owns 100% of the outstanding shares of Series B common stock, which shares will convert on a one-for-one basis into shares of our common stock in the event General Motors transfers such shares to a person that is not controlled by, or under common control with, General Motors. To our knowledge, each person named in the table has sole voting and investment power over the shares listed by that person's name, except where we have shown otherwise in the footnotes or where community property laws affect ownership rights. Except where we show otherwise, the address of each person in this table is: c/o Quantum Fuel Systems Technologies Worldwide, Inc., 25242 Arctic Ocean Drive, Lake Forest, California 92630.

| <u>Name of Beneficial Owner</u> | <u>Shares</u> | <u>Percent of Class</u> |
|--|---------------|-------------------------|
| <i>Greater than 5% Stockholders:</i> | | |
| Crede CG III, Ltd. (1) Clarendon House 2 Church Street Hamilton HM 11, Bermuda | 5,696,919 | 9.9% |
| Capital Ventures International (2) One Capital Place P.O. Box 1787 GT Grand Cayman, Cayman Islands British West Indies | 4,174,753 | 6.9% |
| Heights Capital Management, Inc. (2) 101 California Street, Suite 3250 San Francisco, California 94111 | 4,174,753 | 6.9% |
| Empery Asset Management, LP (3) 1 Rockefeller Plaza, Suite 1205 New York, New York 10020 | 3,172,578 | 5.3% |
| <i>Named Executive Officers and Directors:</i> | | |
| W. Brian Olson (4) | 135,883 | * |
| Kenneth R. Lombardo (5) | 52,983 | * |
| David M. Mazaika (6) | 65,000 | * |
| Brian A. Runkel (7) | 16,788 | * |
| G. Scott Samuelsen (8) | 75,398 | * |
| Carl E. Sheffer (9) | 18,120 | * |
| Paul E. Grutzner (10) | 33,037 | * |
| Jonathan Lundy (11) | 61,442 | * |
| Dale L. Rasmussen (12) | 0 | * |
| Alan P. Niedzwiecki (13) | 0 | * |
| All current directors and executive officers as a group (11 persons) (14) | 574,667 | 1.01% |

* Represents less than 1%.

- (1) Includes 778,887 shares of common stock that are issuable upon exercise of a warrant issued on May 16, 2013 and excludes 2,171,932 shares of common stock potentially issuable upon exercise or exchange of such warrant because such warrant contains a 9.9% blocker provision. Without such limitation on exercise or exchange, Crede CG III would beneficially own 7,868,851 shares of common stock. The sole stockholder of Crede CG III is Crede Capital Group, LLC ("Crede Capital"). Acuitas Financial Group, LLC ("Acuitas") holds all of the membership interests of Crede Capital and Mr. Terren S. Peizer holds all of the membership interests of Acuitas. Voting and dispositive power with respect to the shares held by Crede CG III is exercised by Mr. Peizer, the Managing Director of Crede CG III. Mr. Peizer, Acuitas and Crede Capital disclaim beneficial ownership with respect to the shares held by Crede CG III. This information was derived from Schedule 13G filed by Crede CG III, Ltd. on May 22, 2013.
- (2) Includes 4,174,753 shares of common stock that are issuable upon exercise of warrants. Heights Capital Management, Inc. serves as investment manager to Capital Ventures International. Therefore, Heights Capital Management, Inc. and Capital Ventures International have joint voting and dispositive power with respect to the shares, such that each entity is deemed to beneficially own the shares. Capital Ventures International and Heights Capital Management disclaim any beneficial ownership of any such shares, except for their pecuniary interest therein. This information was derived from Schedule 13G filed by Capital Ventures International on February 13, 2013.
- (3) Includes 3,172,578 shares of common stock issuable upon exercise of warrants. Empery AM GP, LLC, the general partner of Empery Asset Management, LP ("EAM"), has investment discretion and voting power over the shares held by EAM. Ryan Lane and Martin Hoe, in their capacity as managing members of Empery AM GP, LLC, may also be deemed to have investment discretion and voting power over the shares held by EAM. Mr. Lane and Mr. Hoe disclaim beneficial ownership of these shares. This information was derived from Schedule 13G filed by EAM on January 22, 2013.

- (4) Includes 37,500 shares of restricted stock of which 12,500 shares vest on August 2, 2013 and 25,000 shares vest on June 11, 2015, and 40,618 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (5) Includes 13,750 shares of restricted stock of which 8,750 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, and 18,333 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (6) Includes 17,500 shares of restricted stock of which 7,500 shares vest on August 2, 2013 and 10,000 shares vest on June 11, 2015, and 17,500 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (7) Includes 6,250 shares of restricted stock of which 1,250 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, and 7,488 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (8) Includes 6,250 shares of restricted stock of which 1,250 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, and 7,488 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (9) Includes 6,250 shares of restricted stock of which 1,250 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, and 5,764 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (10) Includes 6,250 shares of restricted stock of which 1,250 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, and 5,287 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013.
- (11) Includes 6,250 shares of restricted stock of which 1,250 shares vest on August 2, 2013 and 5,000 shares vest on June 11, 2015, 3,250 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013 and 472 shares owned by Mr. Lundy's spouse.
- (12) Mr. Rasmussen served as our executive Chairman of the Board until his resignation on May 10, 2012.
- (13) Mr. Niedzwiecki served as our President and Chief Executive Officer until his resignation on May 10, 2012.
- (14) Includes an aggregate of 132,500 shares of restricted stock that have not yet vested and 137,555 shares issuable upon exercise of outstanding options that are currently exercisable or will become exercisable within 60 days after May 20, 2013, and 472 shares owned by Mr. Lundy's spouse. All shares of unvested restricted stock may be voted by the holders thereof at meetings of our stockholders.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) requires our directors, executive officers and persons who own more than 10% of our common stock to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Executive officers, directors and greater than 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) reports they file. To our knowledge, based solely on review of the copies of such reports furnished to us or advice that no filings were required, during the fiscal year ended December 31, 2012, all directors, executive officers, and greater than 10% beneficial owners complied with the Section 16 (a) filing requirements.

Compensation of Directors

Board Membership and Board Meeting Fees

Effective May 10, 2012, our non-employee directors are paid an annual fee of \$21,000 for membership on our Board of Directors. Non-employee directors also receive an attendance fee of \$1,750 for regularly scheduled quarterly meetings and an attendance fee ranging from \$700 to \$1,750 for special meetings, with the amount of the fee dependent on the length and nature of the special meeting. Non-employee directors are also reimbursed their reasonable travel-related expenses for meetings attended in person. Prior to May 10, 2012, our non-employee directors received an annual fee of \$30,000 for membership on our Board of Directors and attendance fees of \$2,500 for regularly scheduled quarterly meetings and an attendance fee ranging from \$1,000 to \$2,500 for special meetings, with the amount of the fee dependent on the length and nature of the special meeting.

Committee Fees

Our non-employee directors receive a fee for serving on committees and attending committee meetings. Effective May 10, 2012, the annual fees for the chairpersons of our Audit Committee, Compensation Committee and Nominating and Governance Committee are \$14,000, \$7,000 and \$3,500, respectively; the non-chair members of our Audit Committee receive an annual fee of \$3,500; and members of each committee also receive \$700 for each committee meeting attended. If a non-employee director serves on more than one committee and attends multiple meetings of the same or different committees on the same day, the director receives a single fee for those meetings, or if the committee meeting is held on the same day as a Board meeting, the director receives only the applicable Board meeting fee. Prior to May 10, 2012, the annual fees for the chairpersons of our Audit Committee, Compensation Committee and Nominating and Governance Committee were \$20,000, \$10,000 and \$5,000, respectively; the non-chair members of our Audit Committee received an annual fee of \$5,000; and members of each committee also received \$1,000 for each committee meeting attended.

Stock Awards

Non-employee directors are eligible to participate in our 2011 Stock Incentive Plan. Non-employee directors are entitled to receive a one-time grant of stock options to purchase up to 10,000 shares of our common stock when first elected or appointed to serve on our Board of Directors, and an annual grant of stock options to purchase 10,000 shares of our common stock, unless waived. Additional stock option grants and restricted stock grants to directors are at the discretion of management and our Board of Directors.

On June 11, 2012, all of our non-management directors were granted a one-time special award of 5,000 shares of restricted stock which cliff vest on June 11, 2015 and options to purchase 7,500 shares of our common stock which vest ratably over four years. The Compensation Committee granted the awards to our directors in connection with a Company-wide grant of stock awards based upon the recommendation by the Nominating and Governance Committee that the awards were appropriate in light of the fact that all non-management directors agreed to a 30% reduction in cash fees effective on May 10, 2012 and all non-management directors waived their right to receive their annual stock option grants for fiscal 2011.

Director Compensation for 2012

The table below sets forth the compensation earned by our non-employee directors for the year ended December 31, 2012:

| Name | Fees Earned or Paid in Cash | Stock Awards (1) | Option Awards (2) | Total |
|------------------------|-----------------------------------|---------------------|----------------------|----------|
| Jonathan Lundy (3) | \$42,196 | \$3,075 | \$3,375 | \$48,646 |
| Paul E. Grutzner (4) | \$71,310 | \$3,075 | \$3,375 | \$77,760 |
| Brian A. Runkel (5) | \$61,528 | \$3,075 | \$3,375 | \$67,978 |
| G. Scott Samuelsen (6) | \$65,309 | \$3,075 | \$3,375 | \$71,759 |
| Carl E. Sheffer (7) | \$44,196 | \$3,075 | \$3,375 | \$50,646 |

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- (1) Amounts listed in this column represent the grant date fair value of the stock award determined on the June 11, 2012 grant date determined in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC Topic 718).
 - (2) Amounts listed in this column represent the grant date fair value of the option awards estimated on the August 2, 2010 grant date using the Black-Scholes option-pricing formula. Assumptions made for the purpose of computing these amounts are discussed in our Annual Report on Form 10-K for the year ended December 31, 2012, in Note 13 of the Notes to Consolidated Financial Statements.
 - (3) Mr. Lundy has 1,250 restricted stock awards that cliff vest on August 2, 2013, 5,000 restricted stock awards that cliff vest on June 11, 2015 and 9,750 option awards outstanding (of which 1,125 were vested) at December 31, 2012.
 - (4) Mr. Grutzner has 1,250 restricted stock awards that cliff vest on August 2, 2013, 5,000 restricted stock awards that cliff vest on June 11, 2015 and 11,547 option awards outstanding (of which 3,412 were vested) at December 31, 2012.
 - (5) Mr. Runkel has 1,250 restricted stock awards that cliff vest on August 2, 2013, 5,000 restricted stock awards that cliff vest on June 11, 2015 and 13,738 option awards outstanding (of which 5,613 were vested) at December 31, 2012.
 - (6) Mr. Samuelsen has 1,250 restricted stock awards that cliff vest on August 2, 2013, 5,000 restricted stock awards that cliff vest on June 11, 2015 and 13,738 option awards outstanding (of which 5,613 were vested) at December 31, 2012.
 - (7) Mr. Sheffer has 1,250 restricted stock awards that cliff vest on August 2, 2013, 5,000 restricted stock awards that cliff vest on June 11, 2015 and 12,014 option awards outstanding (of which 3,889 were vested) at December 31, 2012.

CORPORATE GOVERNANCE

Meetings of the Board of Directors

During the year ended December 31, 2012, there were a total of eleven meetings of the Board of Directors. Each director attended, either in person or by telephone, all of the meetings of the Board and the committees of the Board on which he served during his tenure.

Board Independence

Nasdaq listing standards require that a majority of the members of a listed company's board of directors qualify as "independent," as defined under Nasdaq Listing Rules and as affirmatively determined by the board of directors. After review of all the relevant transactions or relationships between each director (and his family members) and the Company, senior management, and our independent auditors, our Board of Directors has affirmatively determined that at all times during the year ended December 31, 2012, a majority of our directors were independent directors within the meaning of applicable Nasdaq rules. At all times since January 1, 2012, Messrs. Grutzner, Runkel, Samuelsen and Sheffer have been independent. The Board determined that Mr. Lundy qualified as independent beginning in August 2012.

Policy on Meetings of Independent Directors

The Board of Directors has adopted a policy that its independent members shall meet separately on a regular basis in executive session without the presence of its non-independent members or members of management.

Board Leadership Structure and Risk Oversight

Our Chief Executive Officer and Chairman of the Board positions have been separated since our inception in 2002. We believe this structure is most appropriate for us as it allows our Chief Executive Officer to focus on day-to-day direction of the Company in furtherance of the long-term strategy established by our Board of Directors, while our Chairman of the Board is able to provide strategic guidance to our Chief Executive Officer and set the agenda for and preside over our Board of Director meetings. Prior to May 10, 2012, our Chairman of the Board was an employee of the Company and, therefore, was not "independent" and did not attend *in camera* sessions of "non-employee" directors. Our Chairman of the Board resigned on May 10, 2012. Jonathan Lundy was appointed as non-executive Chairman of the Board in August 2012. Although we do not have a formal policy in place regarding who presides over *in camera* sessions, Mr. Lundy has performed that function since his appointment in August 2012 as non-executive Chairman of the Board. Prior to then, that function was performed by the Chairman of our Audit Committee. Our "non-employee" directors generally conduct *in camera* sessions on a quarterly basis at each regularly scheduled quarterly meeting and each special meeting.

Our Board of Directors is responsible for the oversight of risks facing the Company. To that end, the Board of Directors receives regular updates from management and the Chairman of each of our committees. The Board of Directors evaluates risks separately and collectively, including oversight of (i) the financial condition of the Company, (ii) the Company's long-term strategy, (iii) the overall industry, (iv) corporate safety, (v) pending or threatened material legal matters, (vi) new developments in regulatory matters, (vii) succession planning, and (viii) other corporate governance matters.

While our Board of Directors has the ultimate oversight responsibility for our risk management process, various committees of our Board of Directors also have responsibility for risk management. In particular, the Audit Committee focuses on financial risk, including internal controls, and the assessments of risks reflected in audit reports. Legal and regulatory compliance risks are also reviewed by our Audit Committee. Risks related to our compensation programs are reviewed by the Compensation Committee. Risks related to succession planning and other corporate governance matters are reviewed by the Nominating and Governance Committee. Our Board of Directors is advised by its committees of significant risks and management's response usually on a quarterly basis.

Stockholder Communications with Directors

We have established a process by which stockholders can communicate with our Board of Directors. Stockholders may communicate with the Board of Directors, or an individual member of the Board of Directors, by sending their communications to the Board of Directors to the following address:

Board of Directors of
Quantum Fuel Systems Technologies Worldwide, Inc.
c/o Corporate Secretary
25242 Arctic Ocean Drive
Lake Forest, CA 92630

Communications received from stockholders are forwarded directly to the Board of Directors, or to any individual member or members, as appropriate, depending on the facts and circumstances outlined in the communication. The Board of Directors has authorized our Corporate Secretary, in his or her discretion, to exclude communications that are patently unrelated to the duties and responsibilities of the Board of Directors, such as spam, junk mail and mass mailings. In addition, material that is unduly hostile, threatening, illegal or similarly unsuitable will be excluded, with the provision that any communication that is filtered out by the Corporate Secretary pursuant to the policy will be made available to any non-management director upon request.

Board Member Attendance at the Annual Meeting

The Board of Directors' policy with regard to Board members' attendance at the annual meetings of stockholders is that attendance is not mandatory but members are encouraged to attend, either in person, by telephone or by other similar means of live communication (including video conference or webcast). All Board members attended the 2012 annual meeting held on August 9, 2012, except for Mr. Grutzner who was unable to attend.

Committees of the Board of Directors

Audit Committee. We have a separately-designated standing audit committee of the Board of Directors established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of our Audit Committee are Messrs. Grutzner (Chair), Lundy and Samuelsen, each of whom is "independent" under applicable Nasdaq rules. Mr. Lundy replaced Mr. Runkel on the Audit Committee in August 2012. Mr. Runkel was "independent" under applicable Nasdaq rules while he served on the Audit Committee. During the year ended December 31, 2012, there were six meetings of the Audit Committee. The Audit Committee reviews our accounting and auditing procedures, reviews our audit and examination results and procedures and consults with our management and our independent auditors prior to the presentation of our financial statements to stockholders. The Audit Committee is directly responsible for the appointment, compensation and oversight of the independent auditors and reviews the independence of the independent auditors as a factor in making these determinations. The Audit Committee meets alone with our independent auditors and with management in separate executive sessions and grants our independent auditors free access to the Audit Committee at any time.

The Board of Directors has determined that at all times since January 1, 2012, each current and former member of the Audit Committee (i) has met the criteria for independence set forth in applicable SEC rules and regulations, including Rule 10A-3(b) under the Exchange Act, (ii) has been an "independent" director as defined in applicable Nasdaq rules, including Rule 5605(a)(2) thereof, (iii) has not participated in the preparation of our financial statements at any time during the past three years, and (iv) has been able to read and understand fundamental financial statements. The Board of Directors has determined that Paul E. Grutzner has the requisite financial sophistication required under Rule 5605(c)(2) of the Nasdaq Rules and has the requisite attributes of an "audit committee financial expert" in accordance with Item 407(d)(5) of Regulation S-K.

The Board of Directors has adopted a formal Audit Committee Charter, which is available on our website at www.qttww.com under "About Quantum - Corporate Governance-Corporate Governance Charter."

Compensation Committee. The current members of our Compensation Committee are Messrs. Grutzner, Runkel, Sheffer and Samuelsen (Chair), each of whom is "independent" under applicable Nasdaq rules. Messrs. Grutzner, Runkel and Samuelsen served on the Compensation Committee at all times during the fiscal year ended December 31, 2012. Mr. Sheffer was appointed to the Compensation Committee in August 2012. During the year ended December 31, 2012, there were five meetings of the Compensation Committee. The Compensation Committee reviews and makes recommendations to our Board of Directors concerning salaries and incentive compensation for our executive officers, identifies performance measures for our executive officers, oversees the administration of our employee benefit plans and approves new plans. The Compensation Committee administers our stock incentive plans. The Compensation Committee may form and delegate authority to subcommittees when appropriate.

For more discussion of the duties and responsibilities of our Compensation Committee and the role of compensation consultants in determining or recommending the amount or form of executive compensation during the year ended December 31, 2012, see "Executive Compensation" in this Proxy Statement.

The Board of Directors has adopted a formal Compensation Committee Charter, which is available on our website at www.qttww.com under "About Quantum - Corporate Governance-Corporate Governance Charter."

Nominating and Governance Committee. The members of our Nominating and Governance Committee are Messrs. Sheffer (Chair), Runkel and Lundy, each of whom is "independent" under applicable Nasdaq rules. Mr. Lundy replaced Mr. Grutzner on the Nominating and Governance Committee in August 2012. Mr. Grutzner was "independent" under applicable Nasdaq rules while he served on the Nominating and Governance Committee. During the year ended December 31, 2012, there were four

meetings of the Nominating and Governance Committee. The Nominating and Governance Committee is responsible for identifying and recommending qualified individuals to become members of our Board of Directors, determining the composition of the Board of Directors and its committees, reviewing Board of Directors' compensation and benefits, reviewing our compliance with the applicable Nasdaq corporate governance listing standards, evaluating compliance with our code of ethics, and implementing processes for effective communication with our stockholders, including reviewing stockholder proposals properly submitted to us.

The policy of the Nominating and Governance Committee is to consider properly submitted stockholder recommendations for candidates for membership on our Board of Directors. In evaluating such recommendations, the Nominating and Governance Committee will address membership criteria set forth below under "Director Qualifications." Any stockholder recommendations proposed for consideration should include the candidate's name and qualifications for membership on the Board of Directors and should be addressed to:

Board of Directors of
Quantum Fuel Systems Technologies Worldwide, Inc.
c/o Corporate Secretary
25242 Arctic Ocean Drive
Lake Forest, CA 92630

In addition, our Bylaws permit stockholders to directly nominate directors at an annual stockholder meeting. For information about directly nominating a director candidate for consideration at an annual stockholder meeting, see "Proposals of Stockholders" on page 36 of this Proxy Statement.

The Board of Directors has adopted a formal Nominating and Governance Committee Charter, which is available on our website at www.qfww.com under "About Quantum - Corporate Governance-Corporate Governance Charter."

Identifying and Evaluating Nominees for Directors

The Nominating and Governance Committee is responsible for monitoring the size and composition of our Board of Directors and for considering and making recommendations to the Board of Directors with respect to nominations or elections of directors. The Nominating and Governance Committee will consider candidates proposed by our management or by our stockholders, but is not limited to such candidates. All candidates are evaluated in connection with the criteria set forth below in "Director Qualifications." Candidates who meet the criteria are interviewed. Based on the interview, the Nominating and Governance Committee recommends candidates to the Board of Directors who meet the criteria for nomination or appointment consideration. Stockholders who wish to submit a recommendation for a candidate must do so in writing. See "Nominating and Governance Committee" under "Committees of the Board of Directors" above. For information about directly nominating a director candidate for consideration at an annual stockholder meeting, see "Proposals of Stockholders" on page 36 of this Proxy Statement for more information.

Director Qualifications

The charter of the Nominating and Governance Committee provides that director nominees be evaluated on factors that the Nominating and Governance Committee considers appropriate, which may include, among other criteria: personal and professional integrity, demonstrated exceptional ability and judgment, broad experience in business, finance or administration, familiarity with our industry, ability to serve the long-term interests of our stockholders, and sufficient time available to devote to our affairs. The Nominating and Governance Committee must also take into account, as applicable, the satisfaction of any independence requirements or other director qualification standards imposed by applicable laws, regulations or listing rules of the Nasdaq Stock Market (or other applicable regulatory agency).

The Company has a mandatory age limit policy that provides that a director nominee cannot be over the age of 72 and an incumbent director that attains the age of 72 during his or her term cannot be re-nominated following expiration of such term.

Although we do not have a formal diversity policy, we believe that it is important that our directors have diverse backgrounds, qualifications and skill sets. Our Nominating and Governance Committee is responsible for ensuring that diversity considerations are considered and discussed in connection with each potential nominee, as well as the Board as a whole. We believe that each of our directors brings a strong and unique background and set of skills to our Board of Directors, giving the Board as a whole competence and experience in a wide variety of areas, including corporate governance and board service, executive management, private equity, finance, renewable energy, manufacturing, marketing, environmental, legal, and automotive. The information presented below regarding each director's specific experience, qualifications, attributes and skills

are what led our Board to the conclusion that each such individual has the skills and qualifications desired of our Board of Directors.

Jonathan Lundy brings to the Board proven leadership skills, a thorough understanding of renewable and alternative energy markets and broad executive management experience in strategic and business development, business planning and operations. Mr. Lundy also has extensive experience in public market legal and corporate governance issues and corporate finance.

Brian A. Runkel brings to the Board his extensive background in a broad range of environmental and green energy issues including renewable energy markets, green transportation regulations, laws and markets, and general environmental laws and regulations. Mr. Runkel has been extensively involved with the environmental and energy industries for over 21 years, both as a lawyer, regulator/political appointee within Federal and California environmental agencies, and as a private sector consultant to the environmental technology and green energy industries. Mr. Runkel also provides valuable and extensive management and financial/budgeting experience, both from managing large agencies and projects within the State of California government, and also as the long-time executive director of one of the leading trade associations for the California environmental industry. In this latter role, Mr. Runkel has advised numerous start-up leading edge environmental and green energy technology companies on various issues that also affect the Company, including market development, export-related issues, government certifications, grants and contracts, strategic planning, and regulatory issues.

G. Scott Samuelsen brings to the Board a vast range of skills and experience in the alternative energy market, including research, publications and teaching of energy in general, fuel cell technology, the hydrogen economy, alternative fuels, hydrogen and electric vehicles, renewable energy, distributed generation, and environmental quality in particular. Mr. Samuelsen is the Director of a major energy research center with over sixty staff, students and contributing faculty, and is responsible in such role for the technical, business and agency relations, and fiscal viability of the program.

Carl E. Sheffer has been involved in the automobile industry for the past 40 years in various capacities. He achieved executive status within the General Motors corporate structure following numerous jobs with diversified responsibilities. Mr. Sheffer's achievements at General Motors were key factors in being selected and hired as the first Vice President, OEM Relations for the SEMA organization, a non-profit organization consisting of seven thousand member companies globally whose business is focused on the automotive accessory aftermarket. He has done consulting work for several member companies following his departure from SEMA in 2007. Mr. Sheffer was selected to be a member of our Board of Directors in 2005 based on his extensive knowledge of the automotive industry and his personal relationships with numerous high-level executives at the various automobile manufacturers.

Paul E. Grutzner has 24 years of experience in the financial industry. Mr. Grutzner has over 15 years of experience with major broker/dealers and has served as managing director for a leading independent retirement plan consulting firm for the past 11 years. Mr. Grutzner brings to the Board extensive executive management experience in business development and strategic planning.

Brian Olson brings to the Board a thorough understanding of the Company's business and business plan, vast knowledge of the industries within which the Company operates, extensive executive management and corporate governance experience and long-standing relationships with investment bankers and stockholders.

Code of Conduct

We have adopted a Code of Business Conduct and Ethics that applies to each of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Our Code of Business Conduct and Ethics is posted on our website at www.qtw.com under "About Quantum-Corporate Governance-Code of Ethics." In addition, we will provide to any person a copy of our Code of Business Conduct and Ethics upon written request to:

Quantum Fuel Systems Technologies Worldwide, Inc.
Attn: Corporate Secretary
25242 Arctic Ocean Drive
Lake Forest, CA 92630

EXECUTIVE COMPENSATION

Overview

The Compensation Committee reviews and makes recommendations to our Board of Directors concerning salaries and incentive compensation for our executive officers, identifies performance measures for our executive officers, oversees the administration of our employee benefit plans and approves new plans. The Compensation Committee also serves as the Administrator of our stock incentive plans. The Compensation Committee may form and delegate authority to subcommittees when appropriate. For the year ended December 31, 2012, our “named executive officers” were W. Brian Olson, our President and Chief Executive Officer, Kenneth R. Lombardo, our Vice President – Legal, General Counsel and Corporate Secretary, David M. Mazaika, our Executive Director of Strategic Development, Alan P. Niedzwiecki, our former Chief Executive Officer, and Dale L. Rasmussen, our former Chairman of the Board.

Compensation Objectives

The objective of the Company’s executive compensation program is to create long-term value for the Company’s stockholders by offering a compensation package to the Company’s named executive officers that is designed to (i) attract talented individuals with unique skill sets and experience in the renewable energy/clean technology sector, (ii) incentivize and motivate those talented individuals to apply their unique skill sets at a superior level and in furtherance of the Company’s strategic plan, (iii) reward those individuals for extraordinary contributions to the Company and major achievements, and (iv) retain those talented and motivated individuals to lead the Company’s future development, growth and success.

The primary elements of the compensation package provided to the named executive officers consists of a base salary, discretionary cash bonus, discretionary grant of equity awards under the Company’s 2011 Stock Incentive Plan, employment-related benefits, and certain limited prerequisites. On an annual basis, the Compensation Committee performs a review of the compensation package for each of the named executive officers and, subject to any contractual restrictions or limitations, makes any adjustments or modifications that it deems reasonable and necessary in light of the Company’s compensation philosophy and objectives. In performing its review, the Compensation Committee first receives a proposal from the Chief Executive Officer which sets forth the Chief Executive Officer’s recommendations for the other named executive officers regarding (i) salary increases, (ii) the amount of discretionary cash bonus, if any, and (iii) the number of equity incentive awards, if any. The Compensation Committee then considers such recommendations along with various other objective and subjective factors, such as the named executive officer’s individual performance and extraordinary contributions during the year, the Company’s performance, stock performance, the results of any reports or studies prepared by a compensation consultant and the desire or need to ensure that the named executive officer remains in the Company’s employ. The compensation package for the Chief Executive Officer is determined solely by the Compensation Committee. The Compensation Committee reviews each element of compensation separately and in the aggregate when making its decisions. In years when discretionary cash bonuses and equity awards are granted, the Compensation Committee also considers the Company’s cash resources and short-term needs in determining the appropriate allocation between the awards. The Compensation Committee has reviewed the Company’s compensation policies and practices for all employees, including the named executive officers, and concluded that they do not reward unreasonable risk or promote excessive risk-taking that is reasonably likely to have a material adverse effect on the Company.

The Compensation Committee may, from time to time, consider benchmarking data, internet-based compensation information and resources, and, as needed, the advice of one or more compensation consultants in order to ensure that the compensation paid to the named executive officers remains competitive. During the year ended December 31, 2012, the Compensation Committee directly engaged Semler Brossy Consulting Group LLC (“Semler Brossy”) to (i) assist the Compensation Committee in connection with proposed amendments to each of the named executive officer’s employment agreements and (ii) perform a peer review compensation analysis for the Company’s Chief Financial Officer who was appointed in May 2012. Semler Brossy did not provide any additional services to the Company during the year ended December 31, 2012.

Components of Executive Compensation

Base Salary

Historically, a large percentage of the overall compensation paid to our named executive officers consisted of a guaranteed base salary. The Compensation Committee believes that a guaranteed base salary is necessary to attract individuals that possess the unique skill set needed for the development and growth of a young company in an emerging industry, and to assure retention of that unique skill set and associated experience, relationships and competitive advantage. The base salaries of the executive officers are determined on the basis of each individual’s responsibilities, qualifications, experience and extraordinary contributions to the Company during the preceding year, as well as the salary practices of the peer group and other companies with which the Company competes for executive talent.

The Compensation Committee reviews the base salaries of the Company's executive officers at least annually in accordance with the criteria set forth above. The weight that the Committee places on different factors may vary from individual to individual, and necessarily involves both objective (e.g., new contracts awarded during the fiscal year) and subjective (e.g., successful external relationships established) measurements of individual performance. None of the named executive officers received a pay increase during the year ended December 31, 2012.

Discretionary Cash Bonus

Each executive officer is eligible to receive a discretionary cash bonus on an annual basis. Cash bonuses are awarded solely at the discretion of the Compensation Committee and are intended to reward outstanding efforts and contributions made during the applicable fiscal year. As a general policy, discretionary cash bonuses, if any, are awarded at or near the end of the fiscal year. However, on occasion the Compensation Committee may award a cash bonus during the course of the fiscal year to reward exemplary and outstanding performance on a particular transaction or project. The Compensation Committee makes its determination as to whether to grant a discretionary annual cash bonus based on the recommendations made by the Chief Executive Officer (for each of the other named executive officers) as well as various individual and Company performance factors such as (i) revenue and EBITDA for the fiscal year compared to prior year and budget, (ii) stock performance, (iii) the executive's individual performance during the year, (iv) extraordinary efforts made by an executive during the fiscal year, (v) major strategic accomplishments, (vi) the desire or need to retain the executive in the face of competition for executive talent in the industry, and (vii) the Company's liquidity.

Historically, discretionary cash bonuses have not been awarded on a regular basis. When granted, the amount of such cash bonuses has been in the range of 5% to 25% of the named executive officer's base salary. No discretionary cash bonuses were awarded for the year ended December 31, 2012.

Equity Awards

The Compensation Committee believes that an important component of the compensation paid to the Company's named executive officers should be derived from equity-based compensation. This compensation takes the form of stock option awards and, under certain circumstances, restricted stock awards. The Compensation Committee believes that stock appreciation and stock ownership in the Company are valuable incentives to executives, that the granting of equity-based awards serves to align their interests with the long-term interests of the stockholders as a whole, and that it encourages executives to manage the Company in its best long-term interests without unreasonable risk-taking.

Prior to October 27, 2011, grants of stock options and restricted stock awards were made under the Company's 2002 Stock Incentive Plan. The 2002 Stock Incentive Plan was terminated on October 27, 2011, when the Company's stockholders approved the Company's 2011 Stock Incentive Plan. Awards made under the 2002 Stock Incentive Plan prior to its termination remain outstanding in accordance with their terms. The Compensation Committee serves as the administrator of the Company's stock incentive plans.

Stock option and restricted stock awards are generally made on an annual basis in connection with the Compensation Committee's annual review of the named executive officer's compensation package. In making its determination as to whether to grant an equity award, the Committee reviews the recommendation made by the Chief Executive Officer (for each of the other named executive officers) as well as objective and subjective performance factors discussed in the *Discretionary Cash Bonus* section above, plus the named executive officer's expected future contributions to the Company and the named executive officer's stock option grant history. However, the Compensation Committee does not give quantitative weight to any particular performance measure.

The Compensation Committee's policy is to price stock options at the closing price on the date of grant. The 2011 Stock Incentive Plan expressly prohibits re-pricing of outstanding options unless approved by our stockholders. Under the 2002 Stock Incentive Plan, the Committee's policy was to treat any proposed re-pricing or exchange of stock options, including by amending outstanding options to lower their exercise price or by canceling any outstanding options and replacing them with new options, as a material amendment to the 2002 Stock Incentive Plan, thus, requiring stockholder approval under applicable laws, rules and regulations. The Compensation Committee's policy is also to require the option and stock awards to vest ratably over a period of time, typically four years for stock options and three years for restricted stock awards.

On June 11, 2012, the Compensation Committee granted to Mr. Olson an award of 25,000 restricted shares and 40,000 stock options; an award to Mr. Lombardo of 5,000 restricted shares and 25,000 stock options; and an award to Mr. Mazaika of 10,000 restricted shares and 25,000 stock options. The restricted shares vest in full on June 11, 2015 and the options vest ratably over four years (25% per year).

Officer Benefits

The named executive officers receive a range of other benefits, including, but not limited to, participation in a 401(k) savings plan with a Company match component, health and dental coverage, Company-paid term life insurance, and standard and supplemental long-term disability coverage. The Company's focus with respect to benefits for each named executive officer is to provide or offer the individual adequate financial protection (i) against "catastrophes" that will interrupt his or her income (i.e. the executive's death or disability, or the illness or injury of the executive or his or her spouse or dependent children), and (ii) for the individual to afford to be able to retire; that is, to be able to stop working, after a career in the workforce, without suffering a significant decline in his or her standard of living. The Company expects the individual to share in the costs of providing certain of these protections, and intends that the individual's wealth accumulation from participating in the Company's stock plans will be a significant source of retirement income.

The Company also provides Mr. Olson and Mr. Lombardo with severance benefits in the event of an involuntary termination of employment. A description of those severance benefits is described under the heading "Employment Arrangements for Named Executive Officers" below.

Perquisites

The Company provides its named executive officers with a limited range of perquisites on a case-by-case basis that it believes is reasonable, competitive and business-justified. These perquisites may include, but are not limited to, a monthly car allowance, term life insurance, and memberships in clubs that are used for business purposes.

Employment Arrangements for Named Executive Officers

W. Brian Olson was appointed to serve as Chief Executive Officer on May 10, 2012. Prior to his appointment as Chief Executive Officer, Mr. Olson served as the Company's Chief Financial Officer. Mr. Olson's employment agreement dated January 10, 2006, which continues to govern his employment arrangement and continues until the earliest of either the Company's or his termination of employment or his disability, death or retirement, as set forth in the agreement, provides for an annual base salary of \$450,000, subject to annual review. The agreement also provides Mr. Olson with the following benefits: (i) the same fringe benefits that are generally made available to the Company's executive officers, (ii) term life insurance of at least \$1,000,000, (iii) supplemental long-term disability coverage, (iv) four weeks' paid vacation per year, (v) a car allowance of \$1,500 per month, and (vi) participation in each incentive compensation plan adopted by the Company. The agreement further provides for severance benefits upon Mr. Olson's termination of employment by the Company without Cause (as defined in the agreement) or by Mr. Olson for Good Reason (as defined in the agreement). The severance benefits include: (i) a lump sum cash payment equal to two times his base salary, (ii) continuation of medical benefits and term life insurance for two years or until Mr. Olson obtains other employment with comparable benefits, (iii) accelerated vesting of all stock awards, and (iv) limited tax gross-up payments to the extent the aggregate severance benefits are subject to excise taxes imposed by Section 280G of the Internal Revenue Code, as amended (the "Internal Revenue Code").

David M. Mazaika has served as the Company's Executive Director Strategic Development since June 27, 2012 and previously served as the Company's Chief Operating Officer. Mr. Mazaika's current annual base salary is \$250,000 and is subject to annual review. Mr. Mazaika does not have a written employment agreement, however, his terms of employment include the following benefits: (i) the same fringe benefits that are generally made available to the Company's executive officers, (ii) Company provided term life insurance of \$125,000, (iii) four weeks' paid vacation per year, (iv) a car allowance of \$1,000 per month, and (v) participation in each incentive compensation plan adopted by the Company.

Kenneth R. Lombardo serves as the Company's General Counsel, Vice President-Legal, and Corporate Secretary pursuant to an Employment Agreement effective as of July 1, 2005, which continues to govern his employment arrangement and continues until the earliest of either the Company's or his termination of employment or his disability, death or retirement, as set forth in the agreement. Mr. Lombardo's current annual base salary is \$260,000 and is subject to annual review. The agreement also provides Mr. Lombardo with the following benefits: (i) the same fringe benefits that are generally made available to the Company's executive officers, (ii) term life insurance of at least \$1,000,000, (iii) supplemental long-term disability coverage, (iv) four weeks' paid vacation per year, (v) a car allowance of \$700 per month, and (vi) participation in each incentive compensation plan adopted by the Company. The agreement further provides for severance benefits upon Mr. Lombardo's termination of employment by the Company without Cause (as defined in the agreement) or by Mr. Lombardo for Good Reason (as defined in the agreement). The severance benefits include: (i) a lump sum cash payment equal to two times his base salary, (ii) continuation of medical benefits and term life insurance for two years or until Mr. Lombardo obtains other employment with comparable benefits, (iii) accelerated vesting of all stock awards, and (iv) limited tax gross-up payments to the extent the aggregate severance benefits are subject to excise taxes imposed by Section 280G of the Internal Revenue Code.

Alan P. Niedzwiecki served as the Company's President and Chief Executive Officer pursuant to an Amended and Restated Employment Agreement entered into on May 1, 2006, which continued until he resigned on May 10, 2012. The agreement provided for an annual base salary of \$725,000, subject to annual review. The agreement also provided Mr. Niedzwiecki with the following benefits: (i) the same fringe benefits that are generally made available to the Company's executive officers, (ii) term life insurance of at least \$1,000,000, (iii) supplemental long-term disability coverage, (iv) personal umbrella coverage of at least \$10,000,000, (v) four weeks' paid vacation per year, (vi) the choice of the use of a company owned or leased vehicle or a car allowance of \$1,000 per month, and (vii) participation in each incentive compensation plan adopted by the Company. The agreement further provided for severance benefits upon Mr. Niedzwiecki's termination of employment by the Company without Cause (as defined in the agreement) or by Mr. Niedzwiecki for Good Reason (as defined in the agreement). The severance benefits included: (i) a lump sum cash payment equal to two times his base salary, (ii) continuation of medical benefits and term life insurance for two years or until Mr. Niedzwiecki obtains other employment with comparable benefits, (iii) accelerated vesting of all stock awards, and (iv) limited tax gross-up payments to the extent the aggregate severance benefits are subject to excise taxes imposed by Section 280G of the Internal Revenue Code.

On May 10, 2012, Mr. Niedzwiecki tendered and the Board accepted his resignation from all officer and director positions with the Company. In connection with Mr. Niedzwiecki's resignation, the Company and Mr. Niedzwiecki entered into a Separation Agreement pursuant to which the Company and Mr. Niedzwiecki provided a broad mutual release, Mr. Niedzwiecki agreed to certain restrictive covenants for a period of twenty-four months, and the Company agreed to pay, subject to Mr. Niedzwiecki's compliance with the terms of the Separation Agreement, severance equal to one year of base pay, or \$725,000, payable over six months in thirteen equal installments. As a result of Mr. Niedzwiecki's resignation, all unvested restricted stock awards were forfeited and unvested stock options terminated on May 10, 2012, and all vested stock options terminated on June 10, 2012.

Dale L. Rasmussen served as the Company's Chairman of the Board pursuant to an Employment Agreement entered into on May 1, 2006, which continued until he resigned on May 10, 2012. The agreement provided for an annual base salary of \$600,000, subject to annual review. The agreement also provided Mr. Rasmussen with the following benefits: (i) the same fringe benefits that are generally made available to the Company's executive officers, (ii) term life insurance of at least \$1,000,000, (iii) supplemental long-term disability coverage, (iv) personal umbrella coverage of at least \$10,000,000, (v) four weeks' paid vacation per year, (vi) the choice of the use of a company owned or leased vehicle or a car allowance of \$1,000 per month, and (vii) participation in each incentive compensation plan adopted by the Company. The agreement further provided for severance benefits upon Mr. Rasmussen's termination of employment by the Company without Cause (as defined in the agreement) or by Mr. Rasmussen for Good Reason (as defined in the agreement). The severance benefits included: (i) a lump sum cash payment equal to two times his base salary, (ii) continuation of medical benefits and term life insurance for two years or until Mr. Rasmussen obtains other employment with comparable benefits, (iii) accelerated vesting of all stock awards, and (iv) limited tax gross-up payments to the extent the aggregate severance benefits are subject to excise taxes imposed by Section 280G of the Internal Revenue Code.

On May 10, 2012, Mr. Rasmussen tendered and the Board accepted his resignation from all officer and director positions with the Company. In connection with Mr. Rasmussen's resignation, the Company and Mr. Rasmussen entered into a Separation Agreement pursuant to which the Company and Mr. Rasmussen provided a broad mutual release, Mr. Rasmussen agreed to certain restrictive covenants for a period of twenty-four months, and the Company agreed to pay, subject to Mr. Rasmussen's compliance with the terms of the Separation Agreement, severance equal to one year of base pay, or \$600,000, payable over six months in thirteen equal installments. As a result of Mr. Rasmussen's resignation, all unvested restricted stock awards were forfeited and unvested stock options terminated on May 10, 2012, and all vested stock options terminated on June 10, 2012. On September 28, 2012, we notified Mr. Rasmussen that we were terminating payments under his Separation Agreement due to our conclusion that he had breached the terms of his Separation Agreement and demanded repayment of the \$461,358 of separation benefits previously paid to him. See "Certain Relationships and Related Transactions" of this Proxy Statement for additional information.

Policy Regarding Deductibility of Compensation

Section 162(m) of the Internal Revenue Code generally disallows an income tax deduction to public companies for compensation over \$1.0 million paid to the Chief Executive Officer and certain other "covered" employees defined in Section 162(m). Under Section 162(m), the Company may deduct compensation in excess of \$1 million if it qualifies as "performance-based compensation," as defined in Section 162(m). Equity awards granted under the Company's 2011 Stock Incentive Plan will qualify as performance-based compensation and be exempt from the Section 162(m) deductibility limit if they are approved by the Compensation Committee and granted in compliance with the requirements of Section 162(m). The Committee believes that in certain circumstances factors other than tax deductibility take precedence when determining the forms and levels of

executive compensation most appropriate and in the best interests of the Company and its stockholders. Given the Company's changing industry and business, as well as the competitive market for outstanding executives, the Compensation Committee believes that it is important for it to retain the flexibility to design compensation programs consistent with the Company's overall executive compensation program, even if some executive compensation is not fully deductible by the Company. Accordingly, the Compensation Committee may from time to time approve elements of compensation for certain officers that are not fully deductible by the Company, and reserves the right to do so in the future when appropriate.

Stockholder Advisory Vote on Executive Compensation and Frequency of Advisory Vote

At the 2012 annual meeting of stockholders held on August 9, 2012, approximately 83% of the votes cast by our stockholders approved the overall compensation of the Company's named executive officers for the eight month period ended December 31, 2012. The Company is currently presenting a "say-on-pay" proposal annually. This year's "say-on-pay" proposal is Proposal 4 in this Proxy Statement.

SUMMARY COMPENSATION TABLE FOR 2012

The following table sets forth information concerning the annual and long-term compensation for services rendered for the year ended December 31, 2012, for the eight month transition period ended December 31, 2011 and for fiscal year ended April 30, 2011 for each of our named executive officers.

| Name and Principal Position | | Salary | Bonus | Stock Awards (1) | Option Awards (2) | All Other Compensation (3) | Total |
|--|--------------------------------------|-----------|-------|---------------------|----------------------|-------------------------------|-------------|
| W. Brian Olson <i>President and Chief Executive Officer and Director</i> | Fiscal year ended December 31, 2012 | \$450,000 | \$ — | \$ 15,375 | \$ 18,000 | \$34,515(4) | \$517,890 |
| | Eight months ended December 31, 2011 | \$300,000 | \$ — | \$ — | \$ — | \$21,766 | \$321,766 |
| | Fiscal year ended April 30, 2011 | \$450,000 | \$ — | \$147,500 | \$110,000 | \$29,662 | \$737,162 |
| Kenneth R. Lombardo <i>Vice President—Legal and Corporate Secretary</i> | Fiscal year ended December 31, 2012 | \$260,000 | \$ — | \$3,075 | \$11,250 | \$18,783(5) | \$293,108 |
| | Eight months ended December 31, 2011 | \$173,333 | \$ — | \$ — | \$ — | \$12,679 | \$186,012 |
| | Fiscal year ended April 30, 2011 | \$260,000 | \$ — | \$ 103,250 | \$77,000 | \$18,737 | \$458,987 |
| David M. Mazaika <i>Executive Director Strategic Development</i> | Fiscal year ended December 31, 2012 | \$250,000 | \$ — | \$6,150 | \$11,250 | \$19,500(6) | \$286,900 |
| | Eight months ended December 31, 2011 | \$166,667 | \$ — | \$ — | \$ — | \$12,900 | \$179,567 |
| | Fiscal year ended April 30, 2011 | \$250,000 | \$ — | \$88,500 | \$66,000 | \$19,350 | \$423,850 |
| Alan P. Niedzwiecki <i>Former President; Chief Executive Officer; Former Director</i> | Fiscal year ended December 31, 2012 | \$250,962 | \$ — | \$ — | \$ — | \$737,214(7) | \$988,176 |
| | Eight months ended December 31, 2011 | \$483,333 | \$ — | \$ — | \$ — | \$25,842 | \$509,175 |
| | Fiscal year ended April 30, 2011 | \$725,000 | \$ — | \$147,500 | \$110,000 | \$40,820 | \$1,023,320 |
| Dale L. Rasmussen <i>Former Executive Chairman of the Board; Former Director</i> | Fiscal year ended December 31, 2012 | \$207,692 | \$ — | \$ — | \$ — | \$613,619(8) | \$821,311 |
| | Eight months ended December 31, 2011 | \$400,000 | \$ — | \$ — | \$ — | \$23,201 | \$423,201 |
| | Fiscal year ended April 30, 2011 | \$600,000 | \$ — | \$147,500 | \$110,000 | \$34,562 | \$892,062 |

- (1) Amounts listed in this column represent the fair value of the stock award based on the fair market value of our common stock on the date of grant in accordance with ASC Topic 718.
- (2) Amounts listed in this column represent the fair value of the award estimated on the grant date using the Black-Scholes option-pricing formula. Assumptions made for the purpose of computing these amounts are discussed in our Annual Report on Form 10-K for the year ended December 31, 2012, in Note 13 of the Notes to Consolidated Financial Statements.
- (3) In accordance with the rules of the SEC, the compensation described in this table does not include various perquisites and other benefits received by a named officer which do not exceed \$10,000 in the aggregate.
- (4) All Other Compensation for Mr. Olson during the year ended December 31, 2012 consisted of auto allowance of \$18,000, life, long term disability and umbrella insurance premiums of \$3,015 and 401(k) match of \$13,500.
- (5) All Other Compensation for Mr. Lombardo during the year ended December 31, 2012 consisted of auto allowance of \$8,400, life and long-term disability insurance premiums of \$2,583, and 410(k) match of \$7,800.
- (6) All Other Compensation for Mr. Mazaika during the year ended December 31, 2012 consisted of auto allowance of \$12,000 and 401(k) match of \$7,500.
- (7) All Other Compensation for Mr. Niedzwiecki during the year ended December 31, 2012 consisted of separation benefits of \$725,000, auto allowance of \$4,154, life, long term disability and umbrella insurance premiums of \$560 and 401(k) match of \$7,500.
- (8) All Other Compensation for Mr. Rasmussen during year ended December 31, 2012 consisted of separation benefits of \$600,000, of which \$461,358 has been paid to date, auto allowance of \$4,154, life and long-term disability insurance premiums of \$1,965, and 410(k) match of \$7,500. On September 28, 2012, we notified Mr. Rasmussen that we were terminating payments under his Separation Agreement due to our conclusion that he had breached the terms of his Separation Agreement and demanded repayment of the \$461,358 of separation benefits previously paid to him. See "Certain Relationships and Related Transactions" of this Proxy Statement for additional information.

OUTSTANDING EQUITY AWARDS AT 2012 FISCAL YEAR END(1)

The following table sets forth the equity awards outstanding as of December 31, 2012 for each of our named executive officers:

| Name | Option Awards | | | | Stock Awards | |
|-------------------------|---|---|-----------------------|------------------------|---|---|
| | Number of Securities Underlying Unexercised Options Exercisable | Number of Securities Underlying Unexercised Options Unexercisable | Option Exercise Price | Option Expiration Date | Number of Shares or Units of Stock that Have Not Vested | Market Value of Shares or Units of Stock that Have Not Vested (2) |
| W. Brian Olson | 3,571 | — | \$22.60 | 8/11/2013 | 37,500(6) | \$25,500 |
| | 2,273 | — | \$22.60 | 3/15/2014 | | |
| | 3,472 | — | \$22.60 | 3/3/2015 | | |
| | 2,344 | — | \$22.60 | 7/12/2015 | | |
| | 5,208 | — | \$22.60 | 8/22/2016 | | |
| | 7,500 | — | \$16.00 | 3/14/2018 | | |
| | 6,250 | 6,250(3) | \$11.80 | 8/2/2020 | | |
| | 40,000(4) | \$0.615 | 6/11/2022 | | | |
| Kenneth R. Lombardo | 625 | — | \$22.60 | 7/12/2015 | 13,750(6) | \$9,350 |
| | 2,083 | — | \$22.60 | 8/22/2016 | | |
| | 5,000 | — | \$16.00 | 3/14/2018 | | |
| | 4,375 | 4,375(3) | \$11.80 | 8/2/2020 | | |
| | 25,000(4) | \$0.615 | 6/11/2022 | | | |
| David M. Mazaika | 5,625 | 1,875(5) | \$20.40 | 1/6/2019 | 17,500(8) | \$11,900 |
| | 3,750 | 3,750(3) | \$11.80 | 8/2/2020 | | |
| | | 25,000(4) | \$0.615 | 6/11/2022 | | |
| Alan P. Niedzwiecki (9) | | | | | | |
| Dale L. Rasmussen (9) | | | | | | |

- (1) All option and stock awards were awarded under our 2002 Stock Incentive Plan prior to its termination on October 27, 2011 when our stockholders approved our 2011 Stock Incentive Plan. Options vest ratably over four years and restricted stock awards cliff vest on the third anniversary of the grant date. As of December 31, 2012, 582,500 awards had been granted under our 2011 Stock Incentive Plan.
- (2) The amounts in this column represent the fair value of the restricted stock as of December 31, 2012 based on a closing price for a share of our common stock on that date of \$0.68.
- (3) One half of the unexercisable portion of the option award will vest on August 2, 2013 and the remaining portion will vest on August 2, 2014.
- (4) The unexercised portion vests ratably over four years commencing on June 11, 2013.
- (5) The unexercisable portion vested on January 6, 2013.
- (6) 12,500 shares will vest on August 2, 2013 and the remaining 25,000 shares will vest on June 11, 2015.
- (7) 8,750 shares will vest on August 2, 2013 and the remaining 5,000 shares will vest on June 11, 2015.
- (8) 7,500 shares will vest on August 2, 2013 and the remaining 10,000 shares will vest on June 11, 2015.
- (9) The executive resigned on May 10, 2012. As a result, all unvested restricted stock awards were forfeited and unvested stock options terminated on May 10, 2012, and all vested stock options terminated on June 10, 2012.

Equity Compensation Plan Information

The following table sets forth information about shares of our common stock that may be issued upon exercise or vesting of options, warrants and other rights under all of our equity compensation plans as of December 31, 2012:

| Plan Category | Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans |
|--|---|---|--|
| Equity Compensation Plans Approved by Security Holders | 693,672 | \$6.24 | 2,583,000(1) |
| Equity Compensation Plans Not Approved by Security Holders | — | — | — |
| Total | 693,672 | \$6.24 | 2,583,000 |

- (1) Represents shares available for issuance under our 2011 Stock Incentive Plan as of December 31, 2012. The 2011 Stock Incentive Plan contains an “evergreen” provision under which the number of shares available for grant under the 2011 Stock Incentive Plan will increase annually by an amount equal to the lesser of (x) 500,000 shares, (y) 3.0% of the number of shares outstanding as of such first day of each year or (z) a lesser number of shares determined by our Board of Directors.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company has not adopted formal written policies and procedures for the review and approval of transactions with related parties. However, pursuant to the Company’s Audit Committee Charter, all related party transactions must first be reviewed and approved by the Audit Committee unless such transaction was already approved by another independent body of the Board. In its review and approval process, the Audit Committee considers various factors including the nature and extent of the conflict of interest, the materiality of the transaction amount, and whether the terms are reasonable and representative of an arm’s length transaction with an unrelated third party.

We have entered into indemnification agreements with each of our directors and executive officers that provide the maximum indemnity available to directors and officers under Section 145 of the Delaware General Corporation Law and our charter, as well as certain additional procedural protections. We have also entered into employment and related agreements with certain of our executive officers, as described under “Executive Compensation—Employment Arrangements for Named Executive Officers” above. On May 10, 2012, the Company entered into Separation Agreements with Mr. Niedzwiecki, the Company’s former President and Chief Executive Officer, and Mr. Rasmussen, the Company’s former Chairman of the Board, in connection with their resignations. Per the terms of the Separation Agreements: (i) we agreed to pay separation benefits equal to one year base pay, or \$725,000 for Mr. Niedzwiecki and \$600,000 for Mr. Rasmussen, payable over six months in thirteen equal installments, (ii) the parties gave and received a broad release, (iii) Messrs. Niedzwiecki and Rasmussen each agreed to comprehensive restrictive covenants for a period of 24 months including non-solicitation of employees and clients and non-interference in business relationships, and (iv) each of Messrs. Niedzwiecki and Rasmussen has an obligation to protect confidential information of the Company and promptly return Company property. The terms of the Separation Agreements were approved by our Board of Directors at a meeting held on May 10, 2012. Mr. Niedzwiecki’s separation payments have been paid in full. On September 28, 2012, we notified Mr. Rasmussen that we were terminating payments under his Separation Agreement due to our conclusion that he had breached the terms of his Separation Agreement and demanded repayment of the \$461,358 of separation benefits previously paid to him. On December 21, 2012, Mr. Rasmussen filed a lawsuit against the Company in the United States District Court, Western District, State of Washington, seeking damages of \$138,462 (which represents the amount of unpaid separation benefits) plus an unspecified amount for statutory damages. The lawsuit is currently pending.

We lease a building located in Irvine, California that served as our corporate headquarters until October 2012. From January 1, 2012 through October 30, 2012, the facility in Irvine was leased from Cartwright, LLC and another unrelated party (collectively referred to as “Cartwright LLC”). The building was sold by Cartwright, LLC on October 30, 2012. Our former Chief Executive Officer and an irrevocable trust established by our former Chairman of the Board collectively owned 86.67% of Cartwright, LLC. The remaining 13.33% of Cartwright, LLC is owned by an unrelated party. During the period from January 1, 2012 through October 30, 2012, for the eight-month period ended December 31, 2011, and for fiscal year ended April 30, 2011, we made cash payments to Cartwright LLC of \$1.0 million, \$0.6 million and \$1.0 million, respectively, in connection with the lease.

REPORT OF THE AUDIT COMMITTEE

The following report of the Audit Committee does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates the report therein.

To the Board of Directors:

The Committee has reviewed and discussed with management the Company's audited financial statements as of and for the year ended December 31, 2012.

The Committee has discussed with Haskell & White LLP, the Company's independent registered public accounting firm, the matters required to be discussed by Statement on Auditing Standards No. 61, *Communication with Audit Committees*, as amended, SEC rules, and other professional standards.

The Committee has received and reviewed the written disclosures and the letter from Haskell & White LLP required by applicable requirements of the Public Company Accounting Oversight Board and has discussed with the auditors their independence.

Based on the reviews and discussions referred to above, the Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2012.

The Committee has also considered whether the provision of services by Haskell & White LLP, other than services related to the audit of the financial statements referred to above and the review of interim financial statements included in the Company's quarterly reports on Form 10-Q for the most recent fiscal year, is compatible with maintaining the independence of Haskell & White LLP.

The Audit Committee
Paul E. Grutzner, Chair
Jonathan Lundy
G. Scott Samuelsen

PROPOSAL 2

RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS

Our Audit Committee has appointed Haskell & White LLP as our independent auditor for the fiscal year ending December 31, 2013. Haskell & White LLP has served as our independent auditor since September 2, 2011. Haskell & White LLP was appointed on September 2, 2011 to replace Ernst & Young, LLP, who was dismissed by our Audit Committee on September 1, 2011 in furtherance of the Company's cost reduction initiatives. Ernst & Young LLP had served as our independent auditor since February 15, 2007. Although not required to be voted upon by the stockholders, our Audit Committee and Board of Directors deem it appropriate for the approval to be submitted for ratification by the stockholders. The persons named in the accompanying proxy will vote the common stock represented by the proxy FOR the ratification of the approval of Haskell & White LLP, unless a contrary choice has been specified in the proxy. If the stockholders do not ratify the approval of Haskell & White LLP by a majority vote, the approval of independent auditors will be reconsidered by our Audit Committee, although the Audit Committee would not be required to approve different independent auditors. A representative of Haskell & White LLP is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she desires to do so. Such representative is expected to be available to respond to appropriate questions.

In concluding that Haskell & White LLP should be appointed as our independent auditor, the Audit Committee considered whether Haskell & White LLP's provision of any professional services other than its audit of our annual financial statements and reviews of quarterly financial statements is compatible with maintaining such auditor's independence.

Other than an explanatory statement included in Ernst & Young LLP's audit report for the Company's fiscal year ended April 30, 2011 relating to the uncertainty of the Company's ability to continue as a going concern, the audit report of Ernst & Young LLP on the Company's financial statements for the fiscal years ended April 30, 2011 and April 30, 2010 did not contain an adverse opinion or a disclaimer opinion, nor was it qualified or modified as to uncertainty, audit scope or accounting principles.

During the Company's 2011 and 2010 fiscal years and through September 1, 2011, there were no disagreements with Ernst & Young LLP on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to Ernst & Young LLP's satisfaction, would have caused them to make reference to the subject matter of the disagreements in connection with their report, and there were no reportable events as that term is described in Item 304(a)(1)(v) of Regulation S-K.

Principal Accountant Fees and Services.

We incurred the following fees related to professional services provided by Haskell & White LLP in connection with our fiscal year ended December 31, 2012 and our eight month transition period ended December 31, 2011:

Audit Fees

The aggregate fees billed by Haskell & White LLP for professional services rendered for the audit of year-end financial statements for the period ended December 31, 2012 and our eight month transition financial statements for the period ended December 31, 2011, the audit of the effectiveness of internal control over financial reporting as required by Section 404 of the Sarbanes-Oxley Act of 2002 as of December 31, 2011, and for the review of the financial statements included in our Quarterly Reports on Form 10-Q for the year ended December 31, 2012 and the eight month period ended December 31, 2011, were \$405,920 and \$404,815, respectively.

Audit-Related Fees

The aggregate fees billed by Haskell & White LLP for professional services rendered during the year ended December 31, 2012 and the eight month transition period ended December 31, 2011, other than services described above under "Audit Fees," were \$61,485 and \$43,889, respectively. These fees related to services provided in connection with Registration Statements.

Tax Fees

We did not pay any fees to Haskell & White LLP for tax compliance, tax advice, and tax planning.

All Other Fees

Haskell & White LLP did not provide any other professional services in the year ended December 31, 2012 or during the eight month transition period ended December 31, 2011.

Pre-Approval of Services by Auditors

The Audit Committee of our Board of Directors has adopted a policy requiring that all services provided to us by our independent auditors be pre-approved by the Audit Committee. The policy pre-approves specific types of services that our independent auditors may provide us if the types of services do not exceed specified cost limits. Any type of service that is not clearly described in the policy, as well as any type of described service that would exceed the pre-approved cost limit set forth in the policy, must be explicitly approved by the Audit Committee prior to any engagement with respect to that type of service. The Audit Committee will review the pre-approval policy and establish fee limits annually, and may revise the list of pre-approved services from time to time.

Additionally, the Audit Committee delegated to its Chairman the authority to explicitly pre-approve engagements with our independent auditors, provided that any pre-approval decisions must be reported to the Audit Committee at its next scheduled meeting. If explicit pre-approval is required for any service, our Chief Financial Officer and our independent auditor must submit a joint request to the Audit Committee or its Chairman describing in detail the specific services proposed and the anticipated costs of those services, as well as a statement as to whether and why, in their view, providing those services will be consistent with the SEC's rules regarding auditor independence.

Of the total aggregate fees paid by us to our accountants during the 2012 fiscal year and the transition period ended December 31, 2011, 4% of the aggregate fees were approved by the Audit Committee pursuant to the *de minimis* exception provided by Section (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

Required Vote

The affirmative vote of the holders of shares representing a majority of the shares present in person or by proxy and entitled to vote at the Annual Meeting is required to approve this Proposal 2. Abstentions will be counted toward the tabulation of votes cast and, therefore, will have the same effect as a negative vote. Broker non-votes will have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THIS PROPOSAL 2, THE RATIFICATION OF AUDITORS PROPOSAL.

PROPOSAL 3
RESOLUTION AUTHORIZING THE BOARD OF DIRECTORS TO AMEND THE COMPANY'S
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO IMPLEMENT
A REVERSE STOCK SPLIT OF THE COMPANY'S COMMON STOCK AT A RATIO WITHIN A RANGE OF 1-
FOR-2 TO 1-FOR-5 AT ANY TIME PRIOR TO JULY 31, 2013

General

Our Board of Directors has approved and is seeking stockholder approval of a resolution to authorize the Board of Directors, without further action of the stockholders, to amend the Company's Amended and Restated Certificate of Incorporation, as amended ("Certificate of Incorporation"), to implement a reverse stock split of the Company's common stock, par value \$0.02 per share, at a ratio within the range of 1-for-2 to 1-for-5 at any time prior to July 31, 2013.

If this Proposal 3 is approved by our stockholders, our Board of Directors will have the authority, without further action on the part of the stockholders, to implement the reverse stock split at any ratio within the range set forth above by filing an amendment to our Certificate of Incorporation with the Secretary of State of the State of Delaware. For the reasons discussed below, we anticipate that the reverse stock split, if this proposal is approved by our stockholders, will be implemented as soon as practicable following the Annual Meeting but in no event no later than July 31, 2013. However, if the amendment to our Certificate of Incorporation has not been filed with the Delaware Secretary of State by the close of business on July 31, 2013, our Board of Directors will abandon the amendment and will not have the authority to implement the reverse stock split without again seeking and obtaining approval from our stockholders.

If the reverse stock split is implemented, the amendment to our Certificate of Incorporation would reduce the authorized number of shares of our common stock in proportion with the ratio selected by our Board of Directors. Except for any changes as a result of the treatment of fractional shares, each stockholder will hold the same percentage of our common stock outstanding immediately after the reverse stock split as such stockholder held immediately prior to the reverse stock split.

The form of the proposed amendment to our Certificate of Incorporation to effect the reverse stock split (the "Reverse Stock Split Amendment") is attached to this Proxy Statement as Annex A; provided, however, that the text set forth in Annex A is subject to such changes as may be required by the Secretary of State of the State of Delaware or as our Board of Directors deems reasonably necessary and advisable to implement the reverse stock split.

Reasons for the Reverse Stock Split

The primary reason for implementing a reverse stock split would be to increase the market price per share of our common stock. The Board of Directors believes that a higher price per share would better enable the Company to maintain the listing of its common stock on the NASDAQ Capital Market. In addition, the Board believes that a higher price per share could result in an increased level of institutional stock ownership and provide the Company with better opportunities to raise capital to fund the Company's operations, expand its business and execute on its business plan.

Our common stock is currently listed on the NASDAQ Capital Market. There are a number of continued listing requirements that we must satisfy in order to maintain our listing on the NASDAQ Capital Market, including a requirement that our common stock maintain a closing price per share of at least \$1.00 (the "Minimum Bid Price Rule"). We are currently not in compliance with the Minimum Bid Price Rule.

On April 30, 2012, the NASDAQ Staff notified us that we were not in compliance with the Minimum Bid Price Rule because the closing price of our common stock was below \$1.00 per share for the prior 30 consecutive business days. The NASDAQ Staff notice further stated that the Company had 180 calendar days, or until October 29, 2012, to regain compliance by attaining a closing bid price of at least \$1.00 for a minimum of 10 consecutive business days. On October 31, 2012, NASDAQ approved the transfer of our listing from the NASDAQ Global Market to the NASDAQ Capital Market. The transfer of our listing to the NASDAQ Capital Market provided us with an additional 180 days, or until April 29, 2013, to regain compliance with the Minimum Bid Price Rule. We did not regain compliance with the Minimum Bid Rule by April 29, 2013. On April 30, 2013, we received a NASDAQ Staff delisting determination letter wherein we were notified that our common stock would be delisted from the NASDAQ Capital Market on May 9, 2013 unless we appealed the Staff's delisting determination by filing a request for a hearing. On May 7, 2013, we filed a request for a hearing with a NASDAQ Hearing Panel, which stayed the delisting process pending the Hearing Panel's decision. Our hearing is scheduled for June 6, 2013. At the hearing, we intend to ask the NASDAQ Hearings Panel to extend the period of time we have to regain compliance with the Minimum Bid Price

rule until August 15, 2013 (the "Requested Extension Date"). Based on our current stock price, we believe that the only way we will be able to regain compliance with the Minimum Bid Price rule before expiration of the Extension Date is by implementing a reverse stock split.

If the NASDAQ Hearings Panel grants our request and provides us until the Requested Extension Date to regain compliance with the Minimum Bid Price rule and we do not regain compliance with the Minimum Bid Price Rule by such date, our common stock will be delisted from the NASDAQ Capital Market. We believe that maintaining the listing of our common stock on the NASDAQ Capital Market is in the best interests of the Company and our stockholders. Listing on the NASDAQ Capital Market increases the liquidity of our common stock and may minimize the spread between the "bid" and "ask" prices quoted by market makers. Further, maintaining our listing on the NASDAQ Capital Market may enhance our access to capital that is necessary to execute on our business plan and fund our operations.

We also believe that the increased market price of our common stock expected as a result of implementing the reverse stock split will improve the marketability and liquidity of our common stock and will encourage interest and trading in our common stock. Because of the trading volatility often associated with low-priced stocks, many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Some of those policies and practices may function to make the processing of trades in low-priced stocks economically unattractive to brokers. Additionally, because brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current average price per share of our common stock can result in individual stockholders paying transaction costs representing a higher percentage of their total stock value than would be the case if the stock price were substantially higher. It should be noted, however, that the liquidity of our common stock may in fact be adversely affected by the proposed reverse stock split given the reduced number of shares that would be outstanding after the reverse stock split is implemented.

In addition, pursuant to the terms of a Securities Purchase Agreement we entered into on May 16, 2013 in connection with a registered direct offering we completed pursuant to which we sold 4,918,032 shares of our common stock and a warrant to initially purchase up to 2,950,819 shares of our common stock to an institutional investor, we covenanted to the investor that we would seek stockholder approval of a reverse stock split in order to remain listed on the NASDAQ Capital Market and, if approved by our stockholders, implement the reverse stock split in order to regain compliance with Minimum Bid Price Rule prior to expiration of the Requested Extension Date. We also agreed that in the event that our common stock was delisted from the NASDAQ Capital Market, then the number of shares underlying the warrant would automatically increase to an amount equal to the product obtained by multiplying the number of shares underlying the warrant at the time of the delisting by 116.667%. To illustrate, if our common stock is delisted from the NASDAQ Capital Market and at the time of the delisting there are 2,950,819 shares of our common stock underlying the warrant we issued on May 16, 2013, then the number of shares underlying such warrant will automatically increase on the date of such delisting to 3,442,632. Therefore, if our common stock is delisted from the NASDAQ Capital Market, our stockholders will be subject to additional dilution as a result of the increase in the number of shares underlying the warrant we issued on May 16, 2013. The investor has agreed to vote any shares it owns as of the Record Date in favor of this Proposal.

For the above reasons, we believe the reverse stock split is in the best interests of the Company and our stockholders. However, we cannot assure you that the reverse stock split, if implemented, will have the desired effect of proportionately raising our common stock price over the long term, or at all. The effect of a reverse split upon the market price of our common stock cannot be predicted with any certainty, and the history of similar stock splits for companies in similar circumstances is varied. Accordingly, we cannot assure you that we will be able to maintain our NASDAQ listing after the reverse stock split is implemented or that the market price per share after the reverse stock split will exceed or remain in excess of the \$1.00 minimum bid price for a sustained period of time. The market price of our common stock may vary based on other factors unrelated to the number of shares outstanding, including our future performance. We also cannot assure you that our common stock will not be delisted in the future due to a failure to meet other continued listing requirements even if the reverse stock split is implemented.

Determination of Ratio

The ratio of the reverse stock split, if approved and implemented, will be a ratio of not less than 1-for-2 and not more than 1-for-5, as determined by the Board in its sole discretion. In determining the reverse stock split ratio, the Board will consider numerous factors including:

- the historical and projected performance of our common stock;
- prevailing market conditions;

- general economic and other related conditions prevailing in our industry and in the marketplace;
- the projected impact of the selected reverse stock split ratio on trading liquidity in our common stock and our ability to continue the common stock's listing on the NASDAQ Capital Market;
- our capitalization (including the number of shares of common stock issued and outstanding);
- the prevailing trading price for our common stock and the volume levels thereof; and
- potential devaluation of our market capitalization as a result of a reverse stock split.

The purpose of asking for authorization to implement the reverse stock split at a ratio to be determined by the Board, as opposed to a ratio fixed in advance, is to give the Board the flexibility to take into account then-current market conditions and changes in the price of our common stock and to respond to other developments that may be deemed relevant when considering the appropriate ratio.

Effects of the Reverse Stock Split

Except for adjustments that may result from the treatment of fractional shares as described below, each stockholder will hold the same percentage of our outstanding common stock immediately following the implementation of the reverse stock split as that stockholder held immediately prior to the reverse stock split. On May 20, 2013, we had 56,815,761 shares of common stock issued and outstanding (which includes 49,998 shares of Series B non-voting common stock) and 93,184,239 shares of common stock that were authorized but unissued (which includes 50,002 shares of Series B non-voting common stock). At May 20, 2013, we have reserved 50,476,450 shares for future issuance, consisting of (i) 46,699,778 shares of common stock potentially issuable upon exercise of outstanding warrants, (ii) 655,389 shares of common stock potentially issuable upon exercise of outstanding stock options and (iii) 3,121,283 shares available for grant under our 2011 Stock Incentive Plan. All of these share numbers will be adjusted in accordance with the ratio of the reverse stock split. With respect to outstanding options and warrants, the respective exercise prices of the options and warrants would increase by a factor equal to the inverse of the reverse split ratio. For example, if a 1-for-3 ratio is selected by our Board of Directors, then the exercise price of our outstanding options and warrants would increase by a factor of 3.

After the reverse stock split is implemented, each stockholder will own a reduced number of shares of our common stock based on the exchange ratio selected by our Board. For example, if our Board decides to implement a 1-for-3 reverse stock split, then for every 3 shares of our common stock that a stockholder owns they will be combined and converted into a single share of our common stock. We estimate that following the implementation of the reverse stock split we would have approximately the same number of stockholders. Except for any changes as a result of the treatment of fractional shares, the completion of the reverse stock split alone would not reduce any stockholder's proportionate ownership interest in the Company. The implementation of the reverse stock split may, however, increase the number of stockholders of the Company who own "odd lots" of less than 100 shares of our common stock. Odd lots may be more difficult to sell, and brokerage commissions and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares of common stock.

Because the reverse stock split, if implemented, would result in a reduction in the number of outstanding shares of our common stock, it would be accompanied by a corresponding decrease in the total number of issued shares of our common stock and a corresponding reduction in the number of shares of common stock that our Board of Directors is authorized to issue under our Certificate of Incorporation. The reverse stock split will not affect the par value of our common stock or the number of shares of preferred stock which the Company may issue, which shall remain at 20,000,000 shares. Our preferred stock is available for issuance from time to time for such purposes and consideration as our Board may approve in their discretion. There are no shares of preferred stock outstanding and we do not currently have any specific arrangements, understandings or agreements, either written or oral, to issue any shares of preferred stock.

The table below illustrates the number of shares of common stock authorized for issuance following the reverse stock split, the approximate number of shares of common stock that would remain outstanding following the reverse stock split, the approximate number of shares of common stock reserved for future issuance upon exercise of outstanding options and warrants following the reverse stock split, and the number of unreserved shares of common stock available for future issuance following the reverse stock split. The information in the following table is based on 56,815,761 shares of common stock issued and outstanding as of May 20, 2013 (which includes 49,998 shares of Series B non-voting common stock).

| Proposed Ratio | Number of Common Shares Authorized | Approximate Number of Common Shares Outstanding | Approximate Number of Common Shares Reserved for Future Issuance | Approximate Number of Unreserved Common Shares Available for Future Issuance |
|----------------|------------------------------------|---|--|--|
| 1-for-2 | 75,000,000 | 28,407,880 | 25,238,225 | 21,353,895 |
| 1-for-3 | 50,000,000 | 18,938,587 | 16,825,483 | 14,235,930 |
| 1-for-4 | 37,500,000 | 14,203,940 | 12,619,112 | 10,676,948 |
| 1-for-5 | 30,000,000 | 11,363,152 | 10,095,290 | 8,541,558 |

Although the Board expects that the reduction in outstanding shares of common stock will result in an increase in the per share price of the Company's common stock, there is no assurance that such a result will occur. Similarly there is no assurance that if the per share price of the Company's common stock increases as a result of the reverse stock split, such increase in the per share price will be permanent, which will be dependent on several factors.

- Should the per share price of our common stock decline after implementation of the reverse stock split, the percentage decline may be greater than would occur in the absence of the reverse stock split.
- The anticipated resulting increase in per share price of the Company's common stock due to the reverse stock split is expected to encourage interest in the Company's common stock and possibly promote greater liquidity for our stockholders. However, such liquidity could also be adversely affected by the reduced number of shares that would be outstanding after the reverse stock split.
- The reverse stock split could be viewed negatively by the market and, consequently, could lead to a decrease in our overall market capitalization. It is often the case that the reverse-split adjusted stock price and market capitalization of companies that effect a reverse stock split decline.
- One of the purposes for the proposed reverse stock split is to regain compliance with the Minimum Bid Price Rule of the NASDAQ Capital Market. However, there can be no assurance that the reverse stock split alone will guarantee the continued listing of our common stock on the NASDAQ Capital Market. If we are unable to regain compliance with the Minimum Bid Price Rule of the NASDAQ Capital Market and our common stock is delisted from the NASDAQ Capital Market, our liquidity and stock price may be negatively affected.

Treatment of Fractional Shares

No fractional shares of common stock will be issued as a result of the reverse stock split. Instead, stockholders who otherwise would be entitled to receive a fractional share of common stock as a consequence of the reverse stock split will, upon surrender to the exchange agent of the certificates representing such fractional shares, be entitled to receive cash in an amount equal to the product obtained by multiplying (i) the closing sale price of our common stock on the business day immediately preceding the effective date of the reverse stock split as reported on the NASDAQ Capital Market by (ii) the number of shares of our common stock held by the stockholder that would otherwise have been exchanged for the fractional share interest.

Exchange of Stock Certificates

The combination of, and reduction in, the number of shares of our outstanding common stock as a result of the reverse stock split will occur automatically on the date that the Reverse Stock Split Amendment is filed with the Delaware Secretary of State (the "Effective Date"), without any action on the part of our stockholders and without regard to the date that stock certificates representing the outstanding shares of our common stock prior to the Effective Date are physically surrendered for new stock certificates.

As soon as practicable after the Effective Date, transmittal forms will be mailed to each holder of record of certificates for our common stock to be used in forwarding such certificates for surrender and exchange for certificates representing the number of shares of our common stock such stockholder is entitled to receive as a result of the reverse stock split. Our transfer agent will act as exchange agent for purposes of implementing the exchange of the stock certificates. The transmittal forms will be accompanied by instructions specifying other details of the exchange. Upon receipt of the transmittal form, each stockholder should surrender the certificates representing our common stock prior to the reverse stock split in accordance with the applicable instructions. Each holder who surrenders certificates will receive new certificates representing the whole number of shares of our common stock that he or she holds as a result of the reverse stock split. New certificates will not be issued to a stockholder

until the stockholder has surrendered his or her outstanding certificate(s) together with the properly completed and executed transmittal form to the exchange agent.

If your shares are held in an account at a brokerage firm or financial institution, which is commonly referred to as your shares being held in “street name,” then you are the beneficial owner of those shares and the brokerage firm or financial institution holding your account is considered to be the stockholder of record. We intend to treat stockholders holding common stock in street name in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers or other nominees will be instructed to effect the reverse stock split for their beneficial holders holding common stock in street name. However, these banks, brokers or other nominees may have different procedures than registered stockholders for processing the reverse stock split. If you hold your shares with a bank, broker or other nominee and if you have any questions in this regard, we encourage you to contact your bank, broker or nominee.

Any stockholder whose certificate has been lost, destroyed or stolen will be entitled to a new certificate only after complying with the requirements that we and our transfer agent customarily apply in connection with replacing lost, stolen or destroyed certificates.

No service charges, brokerage commissions or transfer taxes shall be payable by any holder of any old certificate, except that if any new certificate is to be issued in a name other than that in which the old certificate(s) are registered, it will be a condition of such issuance that (1) the person requesting such issuance must pay to us any applicable transfer taxes or establish to our satisfaction that such taxes have been paid or are not payable, (2) the transfer complies with all applicable federal and state securities laws, and (3) the surrendered certificate is properly endorsed and otherwise in proper form for transfer.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT THEIR STOCK CERTIFICATES UNTIL THEY RECEIVE A TRANSMITTAL FORM FROM OUR TRANSFER AGENT.

Accounting Consequences

The par value of our common stock will remain unchanged at \$0.02 per share after the reverse stock split. As a result, our stated capital, which consists of the par value per share of the common stock multiplied by the aggregate number of shares of the common stock issued and outstanding, will be reduced proportionately at the effective time of the reverse stock split. Correspondingly, our additional paid-in capital, which consists of the difference between our stated capital and the aggregate amount paid to us upon the issuance of all currently outstanding shares of common stock, will be increased by a number equal to the decrease in stated capital. Further, net loss per share, book value per share and other per share amounts will be increased as a result of the reverse stock split because there will be fewer shares of common stock outstanding.

No Appraisal Rights

Under the Delaware General Corporation Law, our stockholders are not entitled to appraisal rights with respect to our proposed reverse stock split, and we will not independently provide our stockholders with any such rights.

No Going Private Transaction

Notwithstanding the decrease in the number of outstanding shares following the implementation of the reverse stock split, our Board of Directors does not intend for this transaction to be the first step in a “going private transaction” within the meaning of Rule 13e-3 of the Securities Exchange Act of 1934, and the implementation of the proposed reverse stock split will not cause the Company to go private.

Book-Entry Shares

If the reverse stock split is effected, stockholders who hold uncertificated shares (i.e. shares held in book entry form and not represented by a physical certificate), whether as direct or beneficial owners, will have their holdings electronically adjusted by our transfer agent (and for beneficial owners by their brokers or banks that hold the shares in street name for their benefit, as the case may be) to give effect to the reverse stock split.

Certain Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following is a summary of certain material U.S. federal income tax consequences of the reverse stock split to holders of our common stock. It addresses only U.S. stockholders who hold the pre-reverse split common stock and post-reverse split common stock as “capital assets” within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the “Code”). This discussion does not purport to be a complete discussion of all of the possible federal income tax consequences of the reverse stock split and does not account for or consider the federal income tax consequences to stockholders in light of their individual investment circumstances or to stockholders subject to special treatment under the federal income tax laws, including but not limited to:

- banks, financial institutions, thrifts, mutual funds or trusts;
- tax-exempt organizations;
- insurance companies;
- dealers in securities or foreign currency;
- real estate investment trusts, personal holding companies, regulated investment companies, or passive foreign investment companies;
- foreign or United States expatriate stockholders;
- stockholders who are not “United States persons,” as defined in Section 7701 of the Internal Revenue Code;
- controlled foreign corporations;
- stockholders with a functional currency other than the U.S. dollar;
- stockholders who hold the pre-reverse split common stock as part of a straddle, hedge, constructive sale, conversion transaction, or other integrated investment;
- stockholders who hold the pre-reverse split common stock as “qualified small business stock” within the meaning of Section 1202 of the Internal Revenue Code;
- common trusts;
- traders, brokers, or dealers in securities who elect to apply a mark-to-market method of accounting;
- partnerships or other pass-through entities or investors in such entities;
- stockholders who are subject to the alternative minimum tax provisions of the Internal Revenue Code;
- stockholders who acquired their pre-reverse split common stock pursuant to the exercise of employee stock options, through a tax-qualified retirement plan, or otherwise as compensation; or
- holders of warrants or stock options.

In addition, this discussion does not address any tax considerations under state, local, gift, or foreign tax laws.

This summary is based upon the Internal Revenue Code, existing and proposed U.S. Treasury regulations promulgated thereunder, legislative history, judicial decisions, and current administrative rulings and practices, all as in effect on the date hereof and all of which are subject to differing interpretations. Any of these authorities could be repealed, overruled, or modified at any time. Any such change could be retroactive and, accordingly, could cause the tax consequences of the reverse stock split to vary substantially from the consequences described herein. Further, no ruling from the Internal Revenue Service (the “IRS”) or opinion of legal or tax counsel will be obtained with respect to the matters discussed herein, and there is no assurance or guarantee that the IRS would agree with the conclusions set forth in this summary. This information is not intended as tax advice to any person and may not be relied upon to avoid penalties.

STOCKHOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES TO THEM OF THE REVERSE STOCK SPLIT, INCLUDING THE APPLICABILITY OF ANY STATE, LOCAL, GIFT, OR FOREIGN TAX LAWS, CHANGES IN APPLICABLE TAX LAWS, AND ANY PENDING OR PROPOSED LEGISLATION OR AUTHORITY.

The reverse stock split is intended to constitute a “recapitalization” within the meaning of Section 368(a)(1)(E) of the Internal Revenue Code. Certain filings with the IRS must be made by the Company and certain “significant holders” of our common stock in order for the reverse stock split to qualify as a recapitalization. The tax consequences discussed below assume that the reverse stock split is treated as a recapitalization:

- A stockholder generally will not recognize gain or loss as a result of the reverse stock split, except to the extent of cash, if any, received in lieu of a fractional share interest in the post-reverse split common stock. A stockholder who receives cash in lieu of a fractional share interest in the post-reverse split common stock generally will recognize gain or loss equal to the difference, if any, between the cash received and the portion of the tax basis of the pre-reverse split common stock allocated to the fractional share interest. Subject to the limitations above and assuming the holder of our common stock holds such stock as a “capital asset” within the meaning of Section 1221 of the Code, such gain or loss will be long-term capital gain or loss if the pre-reverse split common stock was held for more than one year by the stockholder at the time of the reverse stock split. If a stockholder is an individual, such gain may also be subject to an additional 3.8% Medicare tax if such stockholder attains certain income thresholds. A U.S. holder's aggregate tax basis of the post-reverse split common stock received in the reverse stock split will generally be equal to the aggregate tax basis of the pre-reverse split common stock exchanged therefore (excluding any portion of the stockholder's tax basis allocated to fractional share interests). The holding period of the post-reverse split common stock received in the reverse stock split will include the holding period of the pre-reverse split common stock exchanged.
- No gain or loss for federal income tax purposes will be recognized by the Company as a result of the reverse stock split.
- A stockholder’s holding period for the common stock held post-reverse stock split will include the holding period of the pre-reverse stock split common stock exchanged.

The foregoing discussion is intended only as a summary of certain U.S. federal income tax consequences of the reverse stock split and does not purport to be a complete analysis or listing of all potential U.S. federal income tax consequences of the reverse stock split.

Required Vote

The affirmative vote of the holders of shares representing a majority of all of the Company’s issued and outstanding shares of common stock entitled to vote as of the Record Date is required to approve this Proposal 3. Abstentions and broker non-votes will be counted towards the tabulation of votes cast on Proposal 3 and will have the same effect as a negative vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THIS PROPOSAL 3, THE REVERSE STOCK SPLIT AMENDMENT.

PROPOSAL 4
ADVISORY AND NON-BINDING VOTE ON THE COMPENSATION
OF THE NAMED EXECUTIVE OFFICERS

As required by SEC rules, we are asking you to cast an advisory vote on the compensation of the named executive officers as disclosed in this Proxy Statement. This proposal, commonly known as a “say-on-pay” proposal, provides our stockholders the opportunity to express their views on the Company’s executive compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation approach for executive compensation and the Board’s policies and practices described herein. The say-on-pay vote is advisory, and therefore not binding on the Company. However, the Board of Directors and our Compensation Committee value the opinions of the stockholders and will consider the outcome of this vote when making future compensation decisions for named executive officers.

At the 2011 annual meeting of stockholders held on October 27, 2011 for the fiscal year ended April 30, 2011, we held our first advisory, non-binding stockholder vote on the frequency of the say-on-pay proposal. At the 2011 annual meeting, a majority of the votes cast were in favor of a frequency of every one year. As such, we are presenting a say-on-pay vote every year.

As described in the “Executive Compensation” section above, the objective of the Company’s executive compensation program is to create long-term value for the Company’s stockholders by offering a compensation package to the Company’s named executive officers that is designed to (i) attract talented individuals with unique skill sets and experience in the renewable energy/clean technology sector, (ii) incentivize and motivate those talented individuals to apply their unique skill sets at a superior level and in furtherance of the Company’s strategic plan, (iii) reward those individuals for extraordinary contributions to the Company and major achievements, and (iv) retain those talented and motivated individuals to lead the Company’s future development, growth and success. The Compensation Committee continually reviews the compensation program for the Company’s named executive officers to ensure it achieves the desired goals of the compensation program.

Accordingly, the Board asks the stockholders to vote “FOR” the following resolution at the Annual Meeting:

“RESOLVED, that the stockholders of the Company approve, on an advisory basis, the compensation of the named executive officers, as set forth in the Company’s Proxy Statement for the Annual Meeting of Stockholders under the heading “Executive Compensation,” including the compensation tables and narrative discussion.”

Required Vote

The affirmative vote of the holders of shares representing a majority of the shares present in person or by proxy and entitled to vote at the Annual Meeting is required to approve this Proposal 4. Abstentions will be counted toward the tabulation of votes cast and, therefore, will have the same effect as a negative vote. Broker non-votes will have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE “FOR” THIS PROPOSAL 4, THE SAY-ON-PAY PROPOSAL.

PROPOSAL 5

ADJOURNMENT OF THE ANNUAL MEETING

Our stockholders are being asked to consider and vote upon an adjournment of the Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of approval of the proposed amendment to our Amended and Restated Certificate of Incorporation, as amended, to effectuate a reverse stock split as described in Proposal 3.

Required Vote

Approval of the adjournment of the Annual Meeting requires an affirmative vote of a majority of the votes cast on the proposal at the Annual Meeting. Abstentions and broker non-votes will not be counted towards, and will have no effect on, the vote total for this proposal.

THE BOARD RECOMMENDS THAT YOU VOTE “FOR” THE APPROVAL OF THE ADJOURNMENT OF THE ANNUAL MEETING, IF A QUORUM IS PRESENT, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES TO APPROVE PROPOSAL 3.

PROPOSALS OF STOCKHOLDERS

Stockholders may submit proposals on matters appropriate for stockholder action at subsequent annual meetings of the Company consistent with Rule 14a-8 promulgated under the Exchange Act. Proposals of stockholders intended to be presented at our next annual meeting of stockholders and included in the Company's proxy materials must be received by our Corporate Secretary at the address shown at the top of page one of this Proxy Statement, no later than February 11, 2014. All such proposals must also comply with the requirements of Rule 14a-8 of the Exchange Act, regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Stockholder proposals failing to comply with the procedures of Rule 14a-8 will be excluded.

Stockholders also have the right under the Company's Bylaws to bring business from the floor of the 2014 annual meeting, other than through a stockholder proposal in accordance with SEC rules. To do so, stockholders must give timely notice of the proposal in proper written form to the Corporate Secretary and otherwise comply with the provisions in the Bylaws pertaining to stockholder proposals. Pursuant to our Bylaws, stockholders must submit such proposals in writing to our Corporate Secretary at the address shown at the top of page one of this Proxy Statement not later than 90 nor more than 120 days prior to the first anniversary of the preceding year's annual meeting (April 26, 2014 and March 27, 2014, respectively, for the 2014 annual meeting); provided, however, that if the date of the annual meeting is advanced by more than 30 days, or delayed by more than 60 days, from such anniversary date, notice by the stockholder to be timely must be received not earlier than the close of business on the 120th calendar day prior to such annual meeting and not later than the close of business on the later of the 90th calendar day prior to such annual meeting or the 10th calendar day following the calendar day on which notice of the annual meeting date is first publicly disclosed. A stockholder's notice to our Corporate Secretary must set forth for each matter proposed to be brought before the annual meeting (a) as to each person whom the stockholder proposes to nominate for election or re-election as a director, all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act, including such person's written consent to being named in the Proxy Statement as a nominee and to serving as a director if elected; (b) as to any other business that the stockholder proposed to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (c) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder as they appear on the corporation's books, and of such beneficial owner, and (ii) the class and number of shares of the Company which are owned beneficially and of record by such stockholder and such beneficial owner.

OTHER INFORMATION

A copy of our Annual Report on Form 10-K and any amendments thereto for the fiscal year ended December 31, 2012, as filed with the SEC, will be provided to stockholders without charge upon written request to:

Quantum Fuel Systems Technologies Worldwide, Inc.
Attn: Corporate Secretary
25242 Arctic Ocean Drive
Lake Forest, CA 92630
(949) 399-4500 (phone)
(949) 399-4567 (fax)

OTHER BUSINESS

As of the date of this Proxy Statement, management knows of no other business that will be presented for action at the Annual Meeting. No matter currently is expected to be considered at the Annual Meeting other than the proposals set forth in the accompanying Notice of Annual Meeting of Stockholders, but if any other matters are properly brought before the Annual Meeting for action, it is intended that the persons named in the proxy and acting thereunder will vote in accordance with their discretion on such matters.

By Order of the Board of Directors,

/S/ Kenneth R. Lombardo

Kenneth R. Lombardo

Corporate Secretary

Lake Forest, California
June 11, 2013

ANNEX A

FORM OF CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

The corporation, organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL"), does hereby certify:

1. The name of the Corporation is Quantum Fuel Systems Technologies Worldwide, Inc.
2. ARTICLE IV of the Amended and Restated Certificate of Incorporation, as amended to date, is hereby amended and restated in its entirety as follows:

IV. Shares

The total number of shares of all classes of capital stock which the Corporation shall have authority to issue is million shares, consisting of million () shares of common stock with a par value of \$0.02 per share (the "Common Stock") and twenty million (20,000,000) shares of preferred stock with a par value of \$0.001 per share (the "Preferred Stock"). Upon this Certificate of Amendment becoming effective ("Effective Time"), the shares of Common Stock issued and outstanding or held in treasury immediately prior to the Effective Time (the "Old Common Stock") shall be reclassified into a different number of shares of Common Stock (the "New Common Stock") such that each shares of Old Common Stock shall, at the Effective Time, be automatically reclassified into one share of New Common Stock. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of whole shares of New Common Stock into which such Old Common Stock shall have been reclassified pursuant to this Certificate of Amendment. There shall be no fractional shares issued with respect to the New Common Stock. In lieu thereof, the Corporation shall pay to each holder of any such fraction an amount equal to the fair value thereof, as determined in good faith by the Board of Directors.

A. *Preferred Stock.* Any of the shares of Preferred Stock authorized by this Amended and Restated Certificate of Incorporation (this "Certificate of Incorporation") may be issued from time to time in one or more series by the filing of a certificate pursuant to the DGCL (hereinafter referred to as a "Preferred Stock Designation"). Subject to the limitations and restrictions set forth in this Article IV, the Board of Directors of the Corporation (the "Board of Directors"), by resolution or resolutions, is authorized to create or provide for any such series and to fix the designations, powers, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including, without limitation, the authority to fix or alter the dividend rights, dividend rates, conversion rights, exchange rights, voting rights, rights and terms of redemption (including sinking and purchase fund provisions), the redemption price or prices, the preferences upon liquidation, dissolution or winding up of the Corporation and the rights in respect to any distribution of assets of any wholly unissued series of Preferred Stock and the number of shares constituting any such series, and the designation thereof, or any of them and to increase or decrease the number of shares of any series so created, subsequent to the issue of that series but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series.

There shall be no limitation or restriction on any variation between any of the different series of Preferred Stock as to the designation, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof; and the several series of Preferred Stock may, except as hereinafter otherwise expressly provided, in any and all respects as fixed and determined by the Board of Directors, providing for the issuance of the various series; provided, however, that all shares of any one series of Preferred Stock shall have the same designation, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions.

Except as otherwise required by law, or as otherwise fixed by resolution or resolutions of the Board of Directors with respect to one or more series of Preferred Stock, the entire voting power and all voting rights shall be vested exclusively in the Common Stock, and each stockholder of the Corporation who at the time possesses voting power for any purpose shall be entitled to one vote for each share of such stock standing in such stockholder's name on the books of the Corporation. The Corporation shall exercise its power to issue Preferred Stock with the view of avoiding the issuance of fractional shares. No stockholder shall have the right to split whole shares into fractions.

B. *Common Stock.* Any of the shares of Common Stock authorized by this Amended and Restated Certificate of Incorporation may be issued from time to time in one or more series. Subject to the limitations and restrictions set forth in this Article IV, the Board of Directors, by resolution or resolutions, is authorized to create or provide for any such series and to fix the designations, powers, preferences and relative rights and restrictions thereof. () shares of the authorized shares of Common Stock are hereby designated Series B common stock (the "Series B Common"). The relative powers, rights and restrictions granted to or imposed upon the Common Stock, Series B Common, or upon the holders thereof, are set forth below. Except as otherwise provided for herein, all issued and outstanding shares of Common Stock, whether or not separately designated as a series of Common Stock, including the Series B Common, and the holders thereof shall have the same powers and rights.

1. *Dividends.* The holders of shares of all series of Common Stock shall be entitled to receive such dividends as from time to time may be declared by the Board of Directors, subject to the provisions of Subdivision A of this Article IV with respect to rights of holders of the Preferred Stock. The holders of all series of Common Stock shall share ratably, based upon the number of shares of Common Stock or Series B Common held by them, in all dividends to which the holders of Common Stock may be entitled.

2. *Liquidation.* Upon any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, after any preferential amounts to be distributed to the holders of any series of Preferred Stock then outstanding, the holders of all series of Common Stock shall share ratably, based upon the number of shares of Common Stock or Series B Common held by them, in all of the remaining assets of the Corporation available for distribution to its stockholders.

3. *Voting.* Except as otherwise provided by law and subject to the provisions set forth in this Article IV, the holders of all series of Common Stock issued and outstanding shall be entitled to vote one vote for each share thereof held on all matters. Except as otherwise provided by law or by any Preferred Stock Designation, the Common Stock shall have the exclusive right to vote for the election of directors, and holders of Preferred Stock shall not be entitled to receive notice of any meeting of stockholders at which they are not entitled to vote. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the outstanding Common Stock, without a vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to any Preferred Stock Designation.

4. *Certain Defined Terms.*

4.1(a) "Issued and Outstanding Common Shares" shall mean the issued and outstanding shares of Common Stock and all series of Common Stock.

4.1(b) "Extraordinary Common Stock Event" shall mean i) the issuance of additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (ii) a subdivision of outstanding shares of Common Stock into a greater number of shares of Common Stock, or (iii) a combination of outstanding shares of Common Stock into a smaller number of shares of Common Stock.

5. *Designation of Powers and Rights of Series B Common.* The Series B Common authorized under this Certificate of Incorporation shall be convertible into shares of Common Stock, as described in Section

5.3 below. In addition to the powers, rights, restrictions and other matters relating to the Common Stock described above, the Series B Common shall have the following additional rights and restrictions:

5.1 *No Right To Vote.* Except as is otherwise specifically required by law, the holders of the Series B Common shall not be entitled to vote on any matters and shall not be entitled to receive notice of any meeting of stockholders at which they are not entitled to vote.

5.2 *Anti-Dilution Protection.* Upon the happening of an Extraordinary Common Stock Event (as defined in Section 4.1(b) above) after the date this Certificate of Incorporation is filed with the Secretary of State of the State of Delaware, the number of outstanding shares of Series B Common shall be adjusted, upward or downward, to that number of shares of Series B Common that is equal to the percentage of the Issued and Outstanding Common Stock (as defined in Section 4.1 (a) above) that the holders of the Series B Common held immediately prior to the Extraordinary Common Stock Event. If any such adjustment shall result in the reduction of the number of shares of outstanding Series B Common, the holders of certificates representing such shares shall surrender such certificates to the Corporation or its transfer agent for cancellation; provided, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Series B Common issuable upon such adjustment but shall maintain adequate records, accessible to each holder of Series B Common setting forth the effective date of the adjustment, the amount of the required adjustment and the computation thereof. The number of shares of outstanding Series B Common, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Common Stock Event or Events.

5.3 *Automatic Conversion.* Upon the transfer by sale or gift or other means of irrevocable transfer of any of the outstanding shares of Series B Common to any person, corporation, trust or other entity which is an Unaffiliated Holder (as defined below), the transferred shares of Series B Common shall be automatically converted into an equal number of shares of Common Stock. The Corporation shall, as soon as practicable after receiving notice of such a transfer, issue and deliver to the Unaffiliated Holder in exchange for the transferred shares of Series B Common, a certificate or certificates for the number of shares of Common Stock to which it shall be entitled as aforesaid. Upon such conversion and notwithstanding that the certificates evidencing such shares of Series B Common shall not have been surrendered, the shares so converted shall be deemed cancelled and shall not be issuable by the Corporation, the rights of the holders of the Series B Common with respect to such shares shall terminate and the authority of the Corporation to issue the transferred shares of Series B Common shall terminate. This Certificate of Incorporation shall be appropriately amended from time to time to effect the change in the Corporation's authorized capital stock. For purposes of the preceding provisions of this section, an "Unaffiliated Holder" shall mean a natural person, corporation, partnership, trust or other entity that is not controlled by, or under common control with, General Motors, LLC, as determined by majority vote of the Board of Directors, excluding any directors nominated by or serving as representatives of General Motors Corporation; provided, further, that any direct or indirect ownership of an entity that represents twenty percent (20%) or more of the total voting power in an election of directors or managers shall be deemed a controlling interest, absent conclusive evidence to the contrary.

3. This Certificate of Amendment has been duly adopted by the Board of Directors and stockholders of the Corporation in accordance with Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said corporation has caused this certificate to be signed this day of , 2013.

By: _____
Title: Corporate Secretary
Name: Kenneth R. Lombardo