

or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated Filer
 Non-accelerated filer (Do not check if smaller reporting company) Smaller Reporting Company

CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered | Amount to be Registered (1) | Proposed Maximum Offering Price Per Share (2) | Proposed Maximum Aggregate Offering Price | Proposed Maximum Amount of Registration Fee |
|---|-----------------------------------|---|--|--|
| Common stock issuable under the Simulations Plus, Inc. 2007 Stock Option Plan (par value \$0.001 per share) | 1,000,000 shares (3) | \$ 5.76 | \$ 5,760,000 | \$ 741.89 |
| Total | 1,000,000 shares | \$ 5.76 | \$ 5,760,000 | \$ 741.89 |

Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover any additional shares of the Registrant’s common stock that become issuable under the (1) 2007 Stock Option Plan, as Amended by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration that increases the number of the Registrant’s outstanding shares of common stock.

Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) under the (2) Securities Act of 1933, as amended. The offering price per share and aggregate offering price are derived from the average of the high and low prices of Registrant's Common Stock on July 24, 2014, as reported on the NASDAQ.

(3) Represents common stock that may be issued pursuant to awards granted under the Simulations Plus, Inc. 2007 Stock Option Plan, as Amended.

SIMULATIONS PLUS, INC.

REGISTRATION STATEMENT ON FORM S-8

INTRODUCTION

This Registration Statement on Form S-8 is filed by Simulations Plus, Inc. (the “Company”) relating to 1,000,000 shares of the Company's common stock, par value \$0.001 per share (the “Common Stock”), issuable to employees of the Company under the Company’s 2007 Stock Option Plan (the “Plan”).

EXPLANATORY NOTE

This Registration Statement is filed by the Company to register additional securities issuable pursuant to the Plan and consists of only those items required by General Instruction E to Form S-8. The contents of that certain Registration Statement on Form S-8 filed by the Company with the U.S. Securities and Exchange Commission (the “Commission”) on May 11, 2007, Registration No. 333-142882, are incorporated by reference herein.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

I. Plan Information.*

II. Registrant Information and Employee Plan Annual Information.*

* Information required by Part I of Form S-8 to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act of 1933 (the “Securities Act”), and the Note to Part I of Form S-8. The document(s) containing the information specified in Part I of Form S-8 will be sent or given to participants as specified by Securities Act Rule 428(b)(1).

PART II

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Company incorporates by reference in this Registration Statement on Form S-8 the following documents and information filed by the Company with the Commission:

1. The Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2013, filed with the Commission on November 18, 2013;
2. The Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on December 26, 2013;
3. The Company's Quarterly Reports on Form 10-Q, filed with the Commission on January 13, 2014, April 9, 2014, and July 8, 2014;
 4. The Company's Current Report on Form 8-K, filed with the Commission on October 29, 2013;
 5. The Company's Current Report on Form 8-K, filed with the Commission on November 20, 2013;
 6. The Company's Current Report on Form 8-K, filed with the Commission on November 25, 2013;
 7. The Company's Current Report on Form 8-K, filed with the Commission on December 5, 2013;
 8. The Company's Current Report on Form 8-K, filed with the Commission on January 10, 2014;
 9. The Company's Current Report on Form 8-K, filed with the Commission on February 5, 2014;
 10. The Company's Current Report on Form 8-K, filed with the Commission on February 27, 2014;
 11. The Company's Current Report on Form 8-K, filed with the Commission on March 5, 2014;
 12. The Company's Current Report on Form 8-K, filed with the Commission on April 10, 2014;
 13. The Company's Current Report on Form 8-K, filed with the Commission on April 30, 2014;
 14. The Company's Current Report on Form 8-K, filed with the Commission on May 19, 2014;
 15. The Company's Current Report on Form 8-K, filed with the Commission on June 3, 2014;
 16. The Company's Current Report on Form 8-K, filed with the Commission on July 7, 2014;

17. The Company's Current Report on Form 8-K, filed with the Commission on July 9, 2014;
18. The Company's Current Report on Form 8-K, filed with the Commission on July 24, 2014;
19. The Company's Current Report on Form 8-K, filed with the Commission on July 25, 2014;
20. All other reports filed made by the Company with the Commission pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since August 31, 2013; and
21. The description of the Company's common stock contained in the Company's Registration Statements filed with the Commission under the Exchange Act, including any amendments or reports filed for the purposes of updating such descriptions, including without limitation the Company's Registration Statement on Form 8-A (File Number 001-32046) filed with the Commission on March 16, 2004, as subsequently amended.

All documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Our Articles of Incorporation and Bylaws, as amended, generally provides for the maximum indemnification of a corporation's officers and directors as permitted by law in the State of California. California law empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending, or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except in the case of an action by or in the right of the corporation, by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise. Depending on the character of the proceeding, a corporation may indemnify against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding if the person indemnified acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and with respect to any criminal action or proceedings, had no reasonable cause to believe his or her conduct was unlawful.

A corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of

the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise, against expenses, including amounts paid in settlement and attorney's fees actually and reasonably incurred by him or her in connection with the defense or settlement of the action or suit if he or she acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation. Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or its shareholders or for amounts paid in settlement to the corporation unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to above, or in defense of any claim, issue or matter therein, he or she must be indemnified by the corporation against expenses, including attorney's fees, actually and reasonably incurred by him in connection with the defense. The corporation, unless ordered by a court or advanced pursuant to this section, must make any indemnification under this section, only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made by: (a) the shareholders; (b) the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding; (c) independent legal counsel in a written opinion if a quorum of directors who are not parties to the proceeding is not available; or (d) the court in which the proceeding is or was pending, upon the application by the corporation, the agent, the agent's attorney, or other person rendering services in connection with the defense, regardless of whether the corporation opposes the application.

The articles of incorporation, the bylaws or an agreement made by the corporation may provide that the expenses of officers and directors incurred in defending a civil or criminal action, suit or proceeding must be paid by the corporation as they are incurred and in advance of the final disposition of the action, suit or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he or she is not entitled to be indemnified by the corporation. The provisions of this section do not affect any rights to advancement of expenses to which corporate personnel other than directors or officers may be entitled under any contract or otherwise by law.

The indemnification and advancement of expenses authorized in or ordered by a court as described above: (a) do not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under the articles of incorporation or any bylaw, agreement, vote of shareholders or disinterested directors or otherwise, for either an action in his or her official capacity or an action in another capacity while holding his or her office; and (b) continues for a person who has ceased to be a director, officer, employee or agent and inures to the benefit of the heirs, executors and administrators of such a person.

Further, we may enter into agreements of indemnification with our directors to provide for indemnification to the fullest extent permitted under California law.

Item 8. Exhibits.

- 4.1 Articles of Incorporation of the Company (Incorporated by reference to Exhibit 3.1 to the Company's Form 10-K for the fiscal year ended August 31, 2010)
- 4.2 Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Form 10-K for the fiscal year ended August 31, 2010)
- 4.3 Form of Common Stock Certificate (incorporated by reference to the Company's Registration Statement on Form SB-2 (Registration No. 333-6680) filed on March 25, 1997)
- 4.4 Share Exchange Agreement (incorporated by reference to the Company's Registration Statement on Form SB-2 (Registration No. 333-6680) filed on March 25, 1997)
- 5.1 Opinion of Procopio, Cory, Hargreaves & Savitch LLP.
- 23.1 Consent of Rose, Snyder & Jacobs, CPAs, independent registered public accounting firm.
- 23.2 Consent of Procopio, Cory, Hargreaves & Savitch LLP incorporated by reference to Exhibit 5.1 to this Registration Statement on Form S-8.
- 24.1 Power of Attorney, incorporated by reference to the Signature Page of this Registration Statement on Form S-8.
- 99.2

Simulations Plus, Inc. 2007 Stock Option Plan, as amended, incorporated by reference to Appendix A of the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on December 26, 2013.

Item 9. Undertakings.

The undersigned registrant hereby undertakes:

1. (a) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement;

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement;

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that paragraphs 1(a)(i) and 1(a)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Company pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement;

(b) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(c) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new

registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by a final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lancaster, State of California, on this 25th day of July, 2014.

SIMULATIONS PLUS, INC.

By: /s/ Walter S. Woltosz

Walter S. Woltosz, Chairman of the Board of Directors and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Walter S. Woltosz and John R. Kneisel, jointly and severally, as his attorneys-in-fact, with full power of substitution in each, for him in any and all capacities to sign any amendments to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|--|---|------------------|
| /s/ WALTER S. WOLTOSZ Walter S. Woltosz | Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer) | July 25, 2014 |
| /s/ VIRGINIA E. WOLTOSZ Virginia E. Woltosz | Director | July 25, 2014 |
| /s/ DAVID Z. D'ARGENIO Dr. David Z. D'Argenio | Director | July 25, 2014 |
| /s/ DAVID RALPH | Director | |

Dr. David Ralph

July 25,
2014

/s/ HAROLD WAYNE
ROSENBERGER

Director

July 25,
2014

Harold Wayne Rosenberger

/s/ JOHN R. KNEISEL

Chief Financial Officer (Principal Financial Officer and Principal
Accounting Officer)

July 25,
2014

John R. Kneisel