As filed with the Securities and Exchange Commission on July 31, 2014

Registration No. 333-196760

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 2

то FORM S-3

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

MICRONET ENERTEC TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or other jurisdiction of incorporation or organization) 27-0016420 (I.R.S. Employer Identification No.)

28 West Grand Avenue, Suite 3 Montvale, NJ 07645 Telephone: (201) 225-0190

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

David Lucatz President and Chief Executive Officer Micronet Enertec Technologies, Inc. 28 West Grand Avenue, Suite 3 Montvale, NJ 07645 201-225-0190 (Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to: Oded Har-Even, Esq. Howard E. Berkenblit, Esq. Shy S. Baranov, Esq. Zysman, Aharoni, Gayer and Sullivan & Worcester LLP 1633 Broadway New York, NY 10019 Telephone: (212) 660-3000 Facsimile: (212) 660-3001

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement, as determined by market and other conditions.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer:		
Non-accelerated filer:		
(Do not check if a smalle	er reporting compa	any)

Accelerated filer: □ Smaller reporting company: ⊠

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

EXPLANATORY NOTE

This Amendment No. 2 to the Registration Statement on Form S-3 filed by Micronet Enertec Technologies, Inc. on June 13, 2014, as amended on July 21, 2014 (the "Registration Statement"), is being filed solely to file Exhibit 24.2 to the Registration Statement as set forth below in Item 16 of Part II. No changes have been made to Part I or Items 14, 15 or 17 of the Registration Statement.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following is a statement of approximate expenses to be incurred by the Company in connection with the distribution of the securities registered under this registration statement:

	_	Amount
SEC registration fee	\$	3,864
Printing		6,000
Legal fees and expenses		15,000
Miscellaneous		15,136
Total	\$	40,000

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Delaware law generally permits the Company to indemnify its directors, officers, employees and agents. A Delaware 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, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person 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, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit is brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses which such court shall deem proper. To the extent that a former or present director or officer is successful, on the merits or otherwise, in defense of any action, suit, or proceeding subject to the Delaware corporate statute's indemnification provisions, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Delaware law provides that expenses incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation 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 that he or she is not entitled to be indemnified by the corporation. A Delaware corporation has the discretion to decide whether or not to advance expenses, unless provided otherwise in its certificate of incorporation or by-laws.

The Company's Amended and Restated Bylaws provide that it shall indemnify its directors and officers to the fullest extent authorized under Delaware law, and that the Company will advance expenses to any officer or director in advance of the final disposition of the proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined that he or she is not entitled to be indemnified by the Company.

ITEM 16. EXHIBITS.

The exhibits filed with this registration statement are set forth on the "Exhibit Index" set forth elsewhere herein.

ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes:

(A) (1) 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 the 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 the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) 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.

(3) 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.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(B) That, for the 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 Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the 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.

(C) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC 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 registrant 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 registrant 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 whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the 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-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Montvale, New Jersey on July 31, 2014.

MICRONET ENERTEC TECHNOLOGIES, INC.

By: /s/ David Lucatz

Name: David Lucatz Title: President, Chief Executive Officer and Chairman of the Board

POWERS OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints each of David Lucatz and Tali Dinar, and each of them acting singly, as his or her true and lawful attorney-in-fact and agent, each with full power of substitution, for the undersigned in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or his or their substitute or substitutes, may lawfully 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 by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ David Lucatz David Lucatz	- President, Chief Executive Officer and Chairman of the Board (principal executive officer)	July 31, 2014
* Tali Dinar	Chief Financial Officer and Secretary (principal financial and accounting officer)	July 31, 2014
* Jeffrey P. Bailos	Director	July 31, 2014
* Miki Balin	Director	July 31, 2014
* Jacob Berman	Director	July 31, 2014 July 31, 2014
/s/ Chezy Ofir Chezy Ofir	Director	July 51, 2014
*By: /s/ David Lucatz David Lucatz Attorney-in-Fact	-	

EXHIBIT INDEX

Exhibit No.	Description
1.1**	Form of equity Underwriting Agreement in connection with the offering of any securities.
4.1	Composite copy of the Certificate of Incorporation of the Registrant, as amended (Incorporated by reference to Exhibit 3.1 of our Post-Effective Amendment no. 1 to our Registration Statement on Form S-1 (File No. 333-185470), filed with the Securities and Exchange Commission on June 12, 2014).
4.2	Amended and Restated Bylaws of the Registrant (Incorporated by reference to Exhibit 3.5 of Amendment No. 2 to our Registration Statement on Form S- (File No. 333-185470), filed with the Securities and Exchange Commission on March 18, 2013).
4.3**	Form of Warrant Agreement, including form of Warrant.
5.1	Opinion of Zysman, Aharoni, Gayer and Sullivan & Worcester LLP (previously filed).
23.1	Consent of Ziv Haft, BDO member firm (previously filed).
23.2	Consent of Zysman, Aharoni, Gayer and Sullivan & Worcester LLP (previously filed).
24.1	Powers of Attorney (previously filed).
24.2*	Power of Attorney for Mr. Chezy Ofir (included in the signature pages hereto).

Filed herewith.
To be filed by amendment or incorporated by reference in connection with the offering of any securities, asappropriate.