NETWORK-1 SECURITY SOLUTIONS, INC.

Filed Pursuant to Rule 424(b)(3) Registration No. 333-14370

PROSPECTUS SUPPLEMENT NO. 1

(To Prospectus dated April 10, 2012)

This is a prospectus supplement to our prospectus dated April 10, 2012 (the "Prospectus") relating to the resale from time to time by selling stockholders of up to 5,904,897 shares of our common stock, including shares issuable upon exercise of outstanding warrants and options. On April 13, 2012, we filed with the Securities and Exchange Commission a Current Report on Form 8-K. The text of the Current Report on Form 8-K is attached to and a part of this supplement.

This prospectus supplement should be read in conjunction with the Prospectus and may not be delivered or utilized without the Prospectus. This prospectus supplement is qualified by reference to the Prospectus, except to the extent that the information provided by this prospectus supplement supersedes the information contained in the Prospectus.

The securities offered by the Prospectus involve a high degree of risk. You should carefully consider the "Risk Factors" referenced on pages 6-16 of the Prospectus in determining whether to purchase the common stock.

The date of this prospectus supplement is April 13, 2012.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): ____April 11, 2012

Network-1 Security Solutions, Inc.

(Exact name of registrant as specified in its charter)

Delaware	001-15288	11-3027591
(State or other jurisdiction	(Commission	(IRS Employer
of incorporation)	File Number)	Identification No.)
445 Park Avenue, Suite 1020, New York, New York 10022		
(Address of principal executive offices)		
Registrant's telephone number, including area code: (212) 829-5770		
NA		
(Former name or former address, if changed since last report.)		
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (<i>see</i> General Instruction A.2. below):		
□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)		
□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)		
□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))		
□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))		

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

- (d) On April 11, 2012, the Board of Directors of Network-1 Security Solutions, Inc. (the "Company") elected David Kahn as a director. Mr. Kahn will serve as a director until his successor shall have been duly elected and qualified or until his earlier resignation or removal. Mr. Kahn currently serves as Chief Financial Officer of the Company, a position he has held since January 2004. Mr. Kahn, as a management director, will not be compensated for his service on the Board. There are no arrangements or understandings between Mr. Kahn and any other persons pursuant to which he was elected as a director.
- (e) On April 12, 2012, the Company and David Kahn entered into a letter agreement which amended his agreement, dated February 3, 2011, with the Company pursuant to which he serves as Chief Financial Officer of the Company. The amendment (the "Amendment") provided as follows: (i) the term of Mr. Kahn's service as Chief Financial Officer shall be extended until December 31, 2013; (ii) Mr. Kahn's monthly compensation shall be increased to \$11,000 per month; and (iii) Mr. Kahn was granted a 5 year option to purchase 75,000 shares of the Company's common stock at an exercise price of \$1.40 per share (the closing price on the date of grant), which option vests over a one year period in equal quarterly amounts of 18,750 shares. Except as provided in the Amendment, all other terms of the Agreement, dated February 3, 2011, remain in full force and effect.

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

Exhibit No. Description

10.1 Letter Agreement, dated April 12, 2012, between the Company and David C. Kahn.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

NETWORK-1 SECURITY SOLUTIONS, INC.

Dated: April 12, 2012 By: /s/ Corey M. Horowitz

Name: Corey M. Horowitz

Title: Chairman & Chief Executive Officer

April 12, 2012

David C. Kahn 380 Hempstead Avenue - Suite 5 West Hempstead, NY 11552

Dear David:

On behalf of Network-1 Security Solutions, Inc. ("Network-1"), this letter agreement shall amend the Agreement, dated February 3, 2011, between Network-1 and you regarding your services as Chief Financial Officer (the "Agreement"), as follows:

- 1. You shall continue to serve as Chief Financial Officer of Network-1 for an additional one year period through December 31, 2013;
 - 2. Effective on the date hereof, your monthly compensation shall be increased to \$11,000 per month; and
- 3. You are hereby granted a 5 year option to purchase 75,000 shares of Network-1 common stock, at an exercise price equal to today's closing price. The Option shall vest over a one-year period in equal quarterly amounts of 18,750 shares beginning July 12, 2012. Notwithstanding the foregoing, upon a Change in Control of Network-1 (as defined in the Agreement) all of the unvested shares underlying the Option shall become immediately exercisable and shall become 100% vested.

Except as amended herein, the terms of the Agreement shall remain in full force and effect.

Sincerely,

Network-1 Security Solutions, Inc.

By: /s/ Corey M. Horowitz

Agreed and Accepted: Corey M. Horowitz, Chairman and CEO /s/ David C. Kahn

David C. Kahn, CPA