SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NETWORK-1 SECURITY SOLUTIONS, INC. (Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation) 11-3027591 (I.R.S. employer identification number)

1601 TRAPELO ROAD, RESERVOIR PLACE WALTHAM, MASSACHUSETTS 02451 (781) 522-3400 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

NETWORK-1 SECURITY SOLUTIONS, INC. AMENDED AND RESTATED 1996 STOCK OPTION PLAN (Full title of the plan)

MURRAY P. FISH PRESIDENT AND CHIEF FINANCIAL OFFICER NETWORK-1 SECURITY SOLUTIONS, INC. 1601 TRAPELO ROAD, RESERVOIR PLACE WALTHAM, MASSACHUSETTS 02451 (781) 522-3400 (Address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO: SAM SCHWARTZ, ESQ. OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP 505 PARK AVENUE NEW YORK, NEW YORK 10022 (212) 753-7200

<TABLE><CAPTION>

CALCULATION OF REGISTRATION FEE

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 Represents the aggregate number of shares of common stock, par value \$.01 per share (the "Common Stock"), of Network-1 Security Solutions, Inc. (the "Company") issuable upon exercise of stock options granted or to be granted by the Company under its Amended and Restated 1996 Stock Option Plan, as amended and restated to date (the "Plan"), for which no registration statement has been filed. A registration statement (Registration No. 333-93895) covering the other 1,800,000 shares of Common Stock issuable upon exercise of stock options granted under the Plan was filed on December 30, 1999.

- (2) Pursuant to Rule 416, this registration statement also covers such indeterminate additional shares of Common Stock as may become issuable as a result of any future anti-dilution adjustment in accordance with the terms of the Plan.
- (3) Pursuant to Rule 457(h) promulgated under the Securities Act, includes (i) an aggregate of 244,268 shares with respect to which options have been granted under the Plan at an average exercise price of \$ 3.0625 and (ii) an additional 490,732 shares which may be offered under the Plan at a price, based on the average of the high and low sales prices for the shares of Common Stock as reported on The Nasdaq Stock Market's SmallCap Market on June 26, 2001, of \$1.04.

EXPLANATORY NOTES

On December 30, 1999, Network-1 Security Solutions, Inc. (the "Company") filed a Registration Statement on Form S-8 (Registration No. 333-93895) registering 1,800,000 shares of the Company's common stock, par value \$.01 per share (the "Common Stock"), issuable upon exercise of stock options granted by the Company under its Amended and Restated 1996 Stock Option Plan, as amended and restated as of such date (the "Plan"). The Company has prepared this Registration Statement in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the "Securities Act"), to register the 735,000 additional shares of Common Stock issuable upon exercise of stock options that have been added to the Plan.

This Form S-8 includes a Reoffer Prospectus prepared in accordance with Part I of Form S-3 under the Securities Act. The Reoffer Prospectus may be utilized for reofferings and resales of shares of Common Stock acquired pursuant to the Plan by selling stockholders who may be deemed "affiliates" (as such term is defined in Rule 405 under the Securities Act) of the Company. Some of these shares were previously registered.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The Company will provide documents containing the information specified in Part 1 of Form S-8 to employees as specified by Rule 428(b)(1) under the Securities Act. Pursuant to the instructions to Form S-8, the Company is not required to file these documents either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act.

PROSPECTUS

886,518 SHARES NETWORK-1 SECURITY SOLUTIONS, INC. COMMON STOCK (\$.01 PAR VALUE)

This prospectus relates to the reoffer and resale by certain selling stockholders of shares of our common stock that may be issued by us to the selling stockholders upon the exercise of stock options granted under our Stock Option Plan. We previously registered the offer and sale of the shares to the selling stockholders. This prospectus also relates to certain underlying options that have not as of this date been granted. If and when such options are granted to persons required to use this prospectus to reoffer and resell the shares underlying such options, we will distribute a prospectus supplement. The shares are being reoffered and resold for the account of the selling stockholders and we will not receive any of the proceeds from the resale of the shares. The selling stockholders have advised us that the resale of their shares may be effected from time to time in one or more transactions on The Nasdaq Stock Market's SmallCap Market, in negotiated transactions or otherwise, at market prices prevailing at the time of the sale or at prices otherwise negotiated. See "Plan of Distribution." We will bear all expenses in connection with the preparation of this prospectus.

Our common stock is listed on The Nasdaq Stock Market's SmallCap Market. On June 26, 2001, the closing price for our Common Stock, as reported by the Nasdaq SmallCap Market, was \$1.04.

THE SECURITIES OFFERED IN THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE FACTORS DESCRIBED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 4 OF THIS PROSPECTUS.

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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THE DATE OF THIS PROSPECTUS IS JUNE 28, 2001.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission (the "SEC") and therefore omits certain information in such registration statement. We have also filed exhibits with the registration statement that are not included in this prospectus, and you should refer to the applicable exhibit for a complete description of any statement referring to any document. You can inspect a copy of the registration statement and its exhibits, without charge, at the SEC's public reference room, and can copy such material upon paying the SEC's prescribed rates.

You should rely only on the information and representations provided or incorporated by reference in this prospectus or any related supplement. We have not authorized anyone else to provide you with different information. The Selling Stockholders will not make an offer of these shares in any state where the offer is not permitted. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date on the front of those documents.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room located at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. The SEC has prescribed rates for copying. You may obtain further information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to the public over the Internet at the SEC's web site at http://www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered to be a part of this prospectus and information that we file later with the SEC will automatically update and replace the information in this prospectus. Accordingly, we incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended:

- 1. Our Report on Form 8-K filed with the SEC on June 15, 2001;
- Our Quarterly Report on Form 10-QSB for the quarterly period ended March 31, 2001;
- 3. Our Annual Report on Form 10-KSB for the year ended December 31, 2000; and
- 4. The description of our common stock incorporated by reference in our Registration Statement on Form 8-A (filed October 9, 1998), as amended on November 3, 1998.

We will provide at no cost to each person to whom this prospectus is delivered, upon written or oral request, a copy of any of these filings, excluding the exhibits to such filings that we have not specifically incorporated by reference in such filings. You should direct such requests to us at 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451, Attention: Murray Fish, President and Chief Financial Officer, telephone number (781) 522-3400.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are statements that include information based upon beliefs of our management, as well as assumptions made by and information available to our management. Statements containing terms such as "believes," "expects," "anticipates," "intends" or similar words are intended to identify forward-looking statements.

Our management, based upon assumptions they consider reasonable, has compiled these forward-looking statements. Such statements reflect our current views with respect to future events. These statements involve known and unknown risks and uncertainties that may cause our actual results in future periods to differ materially from what is currently anticipated. We make cautionary statements in certain sections of this prospectus, including under "Risk Factors." You should read these cautionary statements as being applicable to all related forward-looking statements wherever they appear in this prospectus, the materials referred to in this prospectus or the materials incorporated by reference into this prospectus.

You are cautioned that no forward-looking statement is a guarantee of future performance and you should not place undue reliance on any forward-looking statement. Such statements speak only as of the date of this prospectus and we are not undertaking any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

3 RISK FACTORS

THE SHARES OFFERED HEREBY ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE FOLLOWING RISK FACTORS BEFORE DECIDING TO INVEST IN OUR COMMON STOCK.

WE HAVE A HISTORY OF LOSSES AND IF WE DO NOT ACHIEVE PROFITABILITY, WE MAY NOT BE ABLE TO CONTINUE OUR BUSINESS IN THE FUTURE.

We have incurred substantial operating losses since our inception, which has resulted in an accumulated deficit of \$27,494,000 as of March 31, 2001 For the three months ended March 31, 2001, we incurred a net loss of \$1,012,000. For the years ended December 31, 2000 and 1999, we incurred net losses of \$4,789,000 and \$6,946,000, respectively. We have financed our operations primarily through the sales of equity and debt securities as well as the sale of our professional services business in February 2000. Our expense levels are high and our revenues are difficult to predict. We anticipate incurring additional losses until we increase our client base and revenues. We may never achieve or sustain significant revenues or profitability. If we are unable to achieve increased revenues, we will continue to have losses and may not be able to continue our operations.

WE COULD BE REQUIRED TO CUT BACK OR STOP OPERATIONS IF WE ARE UNABLE TO RAISE OR OBTAIN NEEDED FUNDING.

Our ability to continue our current level of operations will depend on our ability to raise additional funds through equity or debt financing no later than December, 2001 (or earlier if the Company does not achieve certain revenue assumptions). We are currently seeking financing. However, we currently do not have any definitive arrangements with respect to obtaining additional financing and we may not be able to obtain such financing on commercially reasonable terms, if at all. Our failure to obtain financing by December, 2001, may cause us to substantially curtail or ultimately cease our current level of operations.

WE HAVE NOT ACHIEVED SUBSTANTIAL REVENUE FROM SOFTWARE SALES.

We have made only limited sales of our products. Our total revenues for software licenses for the three months ended March 31, 2001 were \$396,000. Our total revenues for software licenses for the years ended December 31, 2000 and 1999 were \$978,000 and \$260,000, respectively.

THE SALE OF OUR PROFESSIONAL SERVICES BUSINESS WILL HAVE AN ADVERSE EFFECT ON FUTURE CASH FLOW AND REVENUES.

In February 2000, we sold our professional services business to Exodus Communications Inc. for \$3.815 million in cash. As part of the transaction with Exodus, we agreed not to offer any professional or consulting services for two (2) years following the closing. The professional services business accounted for 77% and 62% of our total revenues during the fiscal years ended December 31, 1999 and 1998, respectively. Accordingly, cash flow from operations has been and may continue to be materially adversely effected from the sale of our professional services business until, if ever, we generate sufficient revenue from the licensing of our software products.

OUR REVENUES DEPEND ON SALES OF OUR CYBERWALLPLUS(TM) PRODUCTS AND WE ARE UNCERTAIN WHETHER THERE WILL BE BROAD MARKET ACCEPTANCE OF THESE PRODUCTS.

Our revenue growth for the foreseeable future is dependent upon increased sales of our CYBERWALLPLUS(TM) family of software products. Since the introduction of our predecessor line of security products (FireWall/Plus) in June 1995 through March 31, 2001, license revenue from these software products has been \$4,296,000 including a non-refundable pre-paid royalty of \$500,000 in 1997. Since the introduction of our

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CYBERWALLPLUS(TM) suite of products in January 1999 through March 31, 2001, license revenue from our CYBERWALLPLUS(TM) products was only \$1,563,000. Our future financial performance will depend upon the successful introduction and customer acceptance of our CYBERWALLPLUS(TM) products as well as the development of new and enhanced versions of this product. Revenue from products such as CYBERWALLPLUS(TM) depend on a number of factors, including the influence of market competition, technological changes in the network security market, our ability to design, develop and introduce enhancements on a timely basis and our ability to successfully establish and maintain distribution channels. If we fail to achieve broad market acceptance of our CYBERWALLPLUS(TM) products, it would have a material adverse effect on our business, operating results and financial condition.

OUR INABILITY TO ENTER INTO STRATEGIC RELATIONSHIPS WITH INDIRECT CHANNEL PARTNERS COULD HAVE A MATERIAL ADVERSE EFFECT ON US.

As part of our sales and marketing efforts, we are seeking to develop strategic relationships with indirect channel partners, such as original equipment manufacturers and resellers. We have limited financial, personnel and other resources to undertake extensive marketing activities ourselves. Therefore, our prospects will depend on our ability to develop and maintain strategic marketing relationships with indirect channel partners and their ability to market and distribute our products. If we are unable to enter into and maintain such arrangements or if such arrangements do not result in the successful commercialization of our products, then this could have a material adverse effect on our business, operating results and financial condition.

WE MAY NOT BE ABLE TO SUCCESSFULLY COMPETE IN THE NETWORK SECURITY MARKET.

The network security market is characterized by intense competition and rapidly changing business conditions, customer requirements and technologies. The principal competitive factors affecting the market for network security products include security effectiveness, scope of product offerings, name recognition, product features, distribution channels, price, ease of use and customer service and support. Most of our current and potential competitors have longer operating histories, greater name recognition, larger installed customer bases and possess substantially greater financial, technical and marketing and other competitive resources than us. As a result, our competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the promotion and sale of their products than we may. In addition, certain of our competitors may determine for strategic reasons to consolidate, to substantially lower the price of their network security products or to bundle their products with other products, such as hardware or other enterprise software products. Our current and potential competitors may develop products that may be more effective than our current or future products or that render our products obsolete or less marketable. Increased competition for network security products may result in price reductions and reduced gross margins and may adversely effect our ability to gain market share, any of which would adversely affect our business, operating results and financial condition.

OUR OPERATING RESULTS MAY FLUCTUATE QUARTERLY AND IF THEY WERE BELOW THE EXPECTATIONS OF INVESTORS AND ANALYSTS, THE PRICE OF OUR STOCK WOULD LIKELY BE ADVERSELY EFFECTED.

We anticipate significant quarterly fluctuations in our operations in the future, since our results are dependent on the volume and timing of orders, which are difficult to predict. Customers' purchasing patterns and budgeting cycles, as well as the introduction of new products, may also cause our operating results to fluctuate. Therefore, comparing quarterly operating results may not be meaningful and should not be relied on. Also, our operating results may be below the markets expectations in some future quarters, which would likely have a material adverse effect on our common stock's price.

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WE NEED TO ATTRACT AND RETAIN A QUALIFIED CHIEF EXECUTIVE OFFICER AS WELL AS OTHER QUALIFIED TECHNICAL, SALES, MARKETING DEVELOPMENT AND OTHER MANAGEMENT PERSONNEL.

On June 12, 2001, Avi Fogel resigned as our Chief Executive Officer, President and a Director. Murray Fish, our Chief Financial Officer, is serving as acting President. We are conducting a search for a new Chief Executive Officer. If we are unable to hire and retain a qualified Chief Executive Officer, our business, operating results and financial condition could be materially adversely affected.

Our success will also depend on our ability to attract, train and retain highly qualified technical, sales, marketing, development and other managerial personnel. There is considerable and often intense competition for the services of such personnel. We may not be able either to retain our existing personnel or acquire additional qualified personnel as and when needed. If we are unable to hire and retain such personnel, our business, operating results and financial condition could be materially adversely affected.

WE MAY NOT BE ABLE TO ADEQUATELY PROTECT OUR PROPRIETARY TECHNOLOGY, WHICH COULD RESULT IN LOWER REVENUES AND/OR PROFITS.

We do not hold any patents and rely on copyright and trade secret laws, non-disclosure agreements and contractual provisions to protect our proprietary technology. These methods afford only limited protection. Despite the precautions we take, unauthorized parties may attempt to copy or otherwise obtain and use our proprietary technologies, ideas, know-how and other proprietary information without authorization or may independently develop technologies similar or superior to our technologies. Policing unauthorized use of our products may be difficult and costly. Also, the laws of some foreign countries do not protect our proprietary rights as much as the laws of the United States. We are unable to predict whether our means of protecting our proprietary rights will be adequate. We believe that our technologies have been developed independent of others. Nevertheless, third parties may assert infringement claims against us and our technologies may be determined to infringe on the intellectual property rights of others. We could become liable for damages, be required to modify our technologies or obtain a license if our technologies are determined to infringe upon the intellectual property rights of others. We may not be able to modify our technologies or obtain a license in a timely manner, if required, or have the financial or other resources necessary to defend an infringement action. We would be materially adversely effected if we fail to do any of the foregoing.

WE CAN BE EXPOSED TO NUMEROUS POTENTIAL LIABILITY CLAIMS FOR DAMAGES FROM THE USE OF OUR PRODUCTS AND, IF OUR INSURANCE DOESN'T ADEQUATELY COVER LOSSES, THIS COULD HAVE A MATERIAL ADVERSE EFFECT ON US.

Since our products are used to prevent unauthorized access to and attacks on critical enterprise information, we may be exposed to potential liability claims for damage caused as a result of an actual or alleged failure of an installed product. We cannot assure you that the provisions in our standard license agreements designed to limit our exposure will be enforceable. Our personnel often gain access to confidential and proprietary client information. Any unauthorized use or disclosure of such information could result in a claim for substantial damages. We can give no assurances that our insurance policies will be sufficient to cover potential claims or that adequate levels of coverage will be available in the future at a reasonable cost.

POSSIBLE DELISTING OF OUR SECURITIES FROM NASDAQ SYSTEM; RISKS RELATING TO LOW-PRICED STOCKS.

Our common stock is listed on the Nasdaq SmallCap Market under the symbol "NSSI." In order to continue to be listed on Nasdaq, however, we must comply with certain maintenance standards (including, among others, a minimum stock price of \$1.00 and net tangible assets of a minimum \$2,000,000). In the event of a delisting, an investor could find it more difficult to dispose of or to obtain accurate quotations as to the market value of our common stock.

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In addition, if our common stock were to become delisted from trading on Nasdaq and the trading price of our common stock were to then be below \$5.00 per share, our common stock could be considered a penny stock. SEC regulations generally define a penny stock to be an equity security that is not listed on Nasdaq or a national securities exchange and that has a market value of less than \$5.00 per share, subject to certain exceptions. The SEC regulations would require broker-dealers to deliver to a purchaser of our common stock a disclosure schedule explaining the penny stock market and the risks associated with it. Various sales practice requirements are also imposed on broker-dealers who sell penny stocks to persons other than established customers and accredited investors (generally institutions). Broker-dealers must also provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and monthly account statements disclosing recent price information for the penny stock held in the customer's account. If our common stock is no longer traded on Nasdaq and becomes subject to the regulations applicable to penny stocks, investors may find it more difficult to obtain timely and accurate quotes and execute trades in our common stock.

THE SIGNIFICANT NUMBER OF OPTIONS, WARRANTS AND CONVERTIBLE SECURITIES OUTSTANDING MAY ADVERSELY AFFECT THE MARKET PRICE FOR OUR COMMON STOCK.

As of June 15, 2001, there are outstanding (i) options and warrants to purchase an aggregate of 3,160,124 shares of our common stock at exercise prices ranging from \$1.00 to \$10.125, (ii) 231,054 shares of Series D Convertible Preferred Stock which are convertible at any time into an equal number of shares of our common stock and (iii) debt in the principal amount of \$300,000, which can be converted into 98,360 shares of our Series D Preferred Stock (up to 114,098 shares if interest through the maturity of the promissory notes were also converted into common stock at the same conversion price) and warrants to purchase 98,360 shares of our common stock (up to 114,098 shares if you include potential interest through the maturity of the promissory notes) at exercise prices ranging from \$1.00 to \$3.00 per share. To the extent that outstanding options, warrants or convertible debt are exercised or converted, your percentage ownership will be diluted and any sales in the public market of the common stock underlying such options, warrants or convertible debt may adversely affect prevailing market prices for our common stock.

WE HAVE A SIGNIFICANT AMOUNT OF AUTHORIZED BUT UNISSUED PREFERRED STOCK, WHICH MAY AFFECT THE LIKELIHOOD OF A CHANGE OF CONTROL IN OUR COMPANY.

As of the date of this Prospectus, our Board of Directors has the authority, without further action by the stockholders, to issue 5,000,000 shares of preferred stock (of which only 231,054 shares of Series D Preferred Stock are outstanding as of the date hereof) on such terms and with such rights, preferences and designations as the Board may determine. Such terms may include restricting dividends on our common stock, dilution of the voting power of our common stock or impairing the liquidation rights of the holders of our common stock. Issuance of such preferred stock, depending on the rights, preferences and designations thereof, may have the effect of delaying, deterring or preventing a change in control. In addition, certain "anti-takeover" provisions in Delaware law may restrict the ability of our stockholders to authorize a merger, business combination or change of control.

7 THE COMPANY

We develop, market, license and support a family of network security software products designed to provide comprehensive security to computer networks, including Internet based systems and internal networks and computing resources. Our CYBERWALLPLUS(TM) TM family of security software products enables an organization to protect its computer networks from internal and external attacks and to secure organizational communications over such internal networks and the Internet. Our CYBERWALLPLUS(TM) suite of products was first introduced in January 1999 and evolved from its prior FireWall/Plus suite of security software products. We also offered our customers a full range of consulting services in network security and network design through our professional services group prior to its sale to Exodus Communications, Inc. in February 2000.

The CYBERWALLPLUS(TM) family of security solutions is designed to protect against Internet and Intranet based security threats and to address security needs that arise from within internal networks that often utilize other network transport protocols besides TCP/IP (the Internet network transport protocol) including, among others, Novell's IPX, Digital Equipment's DECnet and IBM's SNA. Our CYBERWALLPLUS(TM) family of network security products operates on tHE Microsoft Windows NT and Windows 2000 operating system platforms. The filter engine software technology of CYBERWALLPLUS(TM) , with its ability to handle and filter all commonly used network transport protocols, provides organizations with a highly secure and flexible security solution. Additionally, unlike most firewall solutions which focus on an enterprise's connection to the Internet, the CYBERWALLPLUS(TM) solution can be deployed throughout the enterprise; at the perimeter to control access to and from the Internet, between internal networks and on application servers and desktop PCs.

Every day, more and more companies are turning to e-Business and extranets as a way to obtain a competitive edge and broaden their markets. The e-Business revolution is helping companies reduce costs, increase responsiveness and provide empowerment through immediate knowledge. However, by tying together previous separate company networks and inviting customers, partners and suppliers onto their networks, companies have found that what were once closed and secure enterprise networks are now becoming open networks.

Within these new open networks, the traditional perimeters and network boundaries have disappeared. We do not believe traditional perimeter security devices such as firewalls can effectively secure all of a network's resources which have embraced e-Business. Our CYBERWALLPLUS(TM) family of products is designed to solve this problem BY protecting data where it resides - between the internal sub networks and inside the server itself - finally allowing organizations to leverage the promise of electronic business, while ensuring the safety of strategic data assets.

Key elements of our strategy are to:

- Focus on securing e-Business networks by replacing perimeter "chokepoint" firewalls with our web server embedded firewalls and intrusion prevention software (CYBERWALLPLUS(TM) - SV);
- o Emphasize the need for internal network security to secure e-Business networks. Internal network security is an important element of an effective multi-layer defense strategy to protect

against external attacks, as the CSI/FBI 2000 Computer Security study indicates that approximately 33% of the organizations with perimeter firewalls were breached by outsiders. In addition, Internal network security is critical to protect enterprise resources from unwelcomed "insider" access. The same CSI/FBI 2000 study found that 79% of all breaches were from those with "insider" access; and

o Implement a sales plan that includes a multi-channel distribution strategy, emphasizing selling direct to end customers and establishing and maintaining third-party resale relationships with OEMs, systems integrators and VARs in the United States and internationally.

We were incorporated under the laws of the State of Delaware in July 1990. Our executive offices are located at 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451 and our telephone number is (781) 522-3400. Our web site can be found at http://www.network-1.com.

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USE OF PROCEEDS

The shares of common stock offered hereby are being registered for the account of the selling stockholders identified in this prospectus. See "Selling Stockholders." All net proceeds from the sale of the common stock will go to the stockholders who offer and sell their shares. We will not receive any part of the proceeds from such sales of common stock. We will, however, receive the exercise price of the options at the time of their exercise. Such proceeds will be contributed to working capital and will be used for general corporate purposes.

SELLING STOCKHOLDERS

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This prospectus relates to the reoffer and resale of shares issued or that may be issued to the selling stockholders under our Stock Option Plan. The following table sets forth (i) the number of shares of common stock beneficially owned by each selling stockholder as of the date of this prospectus, (ii) the number of shares to be offered for resale by each selling stockholder (i.e., the total number of shares underlying options held by each selling stockholder irrespective of whether such options are presently exercisable or exercisable within sixty days of the date of this prospectus), and (iii) the number and percentage of shares of our common stock to be held by each selling stockholder after completion of the offering. <TABLE><CAPTION>

	NUMBER OF SHARE OF COMMON STOCI BENEFICIALLY OWNED PRIOR TO	K NUMBER OI SHARES OF	OF COMMON	R OF SHARES N STOCK OU' FICIALLY OWN	PERCENTAGE OF TSTANDING ED COMMON STOCK		
NAME		BEING OFFEF			AFTER OFFERING(4)		
 <s></s> Barry Rubenstein Wheatley Partner Woodland Ventu Seneca Ventures Woodland Partner 	re Fund	-	<c> 1,840,265</c>	27.6%			
Irwin Lieber Wheatley Partner	1,384,481 (7) s II, L.P.	59,375 (8)	1,336,981	20.9%			
Corey M. Horowitz	896,991 (9)	53,125 (10)	855,741	12.8%			
CMH Capital Management Corp.							
Avi A. Fogel	522,423 (11)	325,725 (12)	361,236	5.3%			
Murray P. Fish	79,170 (13)	156,269 (14)	0	0			
Joseph A. Donohuo	e 62,548 (15	151,399 (16)	0	0			
Emanuel R. Pearlm	an 43,322 (1	7) 31,250 (18)	20,822	*			
Mark Tuomenoksa	20,000 (19	9) 25,000 (20)	0	0			
Jonathan Mark 							

 15,000 (21) | 25,000 (22) | 0 | 0 | |* Less than 1%

(1) Unless otherwise indicated, we believe that all people named in the above table have sole voting and investment power with respect to all shares of common stock beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days from the date hereof upon the exercise of options, warrants or convertible securities. Each beneficial owner's percentage ownership is determined by assuming that options, warrants and convertible securities held by such person (but not those held by any other person) and which are exercisable or convertible within 60 days have been exercised or converted.

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- (2) Consists of shares issuable upon the exercise of options both currently exercisable and not currently exercisable.
- (3) Beneficial ownership of shares held by each selling stockholder after this offering assumes that each selling stockholder sold all of the shares it is offering in this prospectus but actually will depend on the number of shares sold by such selling stockholder in this offering.
- (4) Assumes a base of 6,467,458 shares of common stock outstanding.
- (5) Includes (i) 31,040 shares of common stock held by Mr. Rubenstein, (ii) 47,500 shares of common stock subject to currently exercisable stock options held by Mr. Rubenstein, (iii) 50,159 shares of common stock subject to currently exercisable warrants held by Mr. Rubenstein, (iv) 1,194,659, 151,628 and 133,780 shares of common stock held by Wheatley Partners II,

L.P., Woodland Venture Fund and Seneca Ventures, respectively, (v) 69,379, 34,689, 34,689 and 495 shares of common stock subject to currently exercisable warrants held by Woodland Venture Fund, Seneca Ventures, Woodland Partners and Marilyn Rubenstein, respectively, and (vi) 69,379, 34,689, 34,689, 495 and 495 shares of common stock issuable upon conversion of Series D Preferred Stock held by Woodland Venture Fund, Seneca Ventures, Woodland Partners, Barry Rubenstein and Marilyn Rubenstein, respectively. Barry Rubenstein is a general partner of Wheatley Partners II, L.P. Barry Rubenstein and Woodland Services Corp. are the general partners of Woodland Venture Fund and Seneca Ventures. Barry Rubenstein is the President and sole director of Woodland Services Corp. Barry Rubenstein is the general partner of Woodland Partners. Marilyn Rubenstein is the wife of Barry Rubenstein. Mr. Rubenstein disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., except to the extent of his equity interest therein. Does not include 11,875 shares of common stock subject to stock options which are not currently exercisable.

- (6) Includes 47,500 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 11,875 shares of common stock subject to stock options not currently exercisable held by Mr. Rubenstein.
- (7) Includes (i) 23,280 shares of common stock held by Mr. Lieber, (ii) 47,500 shares of common stock subject to currently exercisable stock options held by Mr. Lieber, (iii) 84,353 shares of common stock subject to currently exercisable warrants held by Mr. Lieber, (iv) 1,194,659 shares of common stock held by Wheatley Partners II, L.P., and (v) 34,689 shares of common stock issuable upon conversion of Series D Preferred Stock held by Mr. Lieber. Irwin Lieber is a general partner of Wheatley Partners II, L.P. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., except to the extent of his equity interest therein. Does not include 11,875 shares of common stock subject to stock options which are not currently exercisable.
- (8) Includes 47,500 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 11,875 shares of common stock subject to stock options not currently exercisable held by Mr. Lieber.
- (9) Includes (i) 486,303 shares of common stock held by Mr. Horowitz, (ii) 41,250 shares of common stock subject to currently exercisable stock options held by Mr. Horowitz, (iii) 155,463 shares of common stock held by CMH Capital Management Corp. ("CMH"), (iv) 124,936 shares of common stock subject to currently exercisable warrants held by CMH, (v) 85,220 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz, (vi) 2,291 shares of Common Stock held by Horowitz Partners, a general partnership of which Mr. Horowitz is a partner and (vii) 1,528 shares of Common Stock held by Donna Slavitt, Mr. Horowitz' wife. Does not include 11,875 shares of common stock subject to stock options which are not currently exercisable. The address of CMH Capital Management Corp. is 885 Third Avenue, New York, New York 10022.
- (10) Includes 41,250 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 11,875 shares of common stock subject to stock options not currently exercisable, held by Mr. Horowitz.

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- (11) Includes (i) 49,700 shares of Common Stock owned by Mr. Fogel, (ii) 456,066 shares of common stock subject to currently exercisable stock options and (iii) 16,657 shares of common stock subject to currently exercisable warrants. Does not include 164,538 shares subject to stock options which are not currently exercisable.
- (12) Includes 161,187 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 164,538 shares of common stock subject to stock options not currently exercisable, held by Mr. Fogel.
- (13) Includes 79,170 shares of Common Stock subject to currently exercisable stock options issued to Mr. Fish pursuant to the Stock Option Plan. Does not include 77,099 shares of Common Stock subject to stock options which are not currently exercisable.
- (14) Includes 79,170 shares of common stock subject to currently exercisable

stock options issued pursuant to the Stock Option Plan and 77,099 shares of common stock subject to stock options not currently exercisable, held by Mr. Fish.

- (15) Includes 62,548 shares of Common Stock subject to currently exercisable stock options issued to Mr. Donohue pursuant to the Stock Option Plan. Does not include 88,851 shares of Common Stock subject to stock options which are not currently exercisable.
- (16) Includes 62,548 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 88,851 shares of common stock subject to stock options not currently exercisable, held by Mr. Donohue.
- (17) Includes (i) 4,430 shares of Common Stock owned by an entity controlled by Mr. Pearlman, (ii) 22,500 shares of common stock subject to currently exercisable options issued to Mr. Pearlman pursuant to the Stock Option Plan, (ii) 4,098 shares of common stock subject to currently exercisable warrants, (iii) 4,098 shares of common stock issuable upon conversion of Series D Preferred, (iv) 4,098 shares of common stock subject to currently exercisable warrants underlying certain promissory notes and (v) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes. Does not include 8,750 shares of common stock subject to options not currently exercisable.
- (18) Includes 22,500 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 8,750 shares of common stock subject to stock options not currently exercisable, held by Mr. Pearlman.
- (19) Includes 20,000 shares of Common Stock subject to currently exercisable options issued to Mr. Tuomenoksa. Does not include 5,000 shares of Common Stock subject to options not currently exercisable.
- (20) Includes 20,000 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 5,000 shares of common stock subject to stock options not currently exercisable, held by Mr. Tuomenoksa.
- (21) Includes 15,000 shares of Common Stock subject to currently exercisable options issued to Mr. Mark. Does not include 10,000 shares of Common Stock subject to options not currently exercisable.
- (22) Includes 15,000 shares of common stock subject to currently exercisable stock options issued pursuant to the Stock Option Plan and 10,000 shares of common stock subject to stock options not currently exercisable, held by Mr. Mark.

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PLAN OF DISTRIBUTION

This offering is self-underwritten. Neither the selling stockholders nor we have employed an underwriter for the sale of common stock by the selling stockholders. We will bear all expenses in connection with the preparation of this Prospectus. The selling stockholders will bear all expenses associated with the sale of the common stock.

At the time a selling stockholder makes an offer to sell shares, to the extent required by the Securities Act, a prospectus will be delivered. If a supplemental prospectus is required, one will be delivered setting forth the number of shares being offered and the terms of the offering.

The selling stockholders may sell the shares in transactions in the over-the-counter market, in negotiated transactions, or a combination of such methods of sale. The selling stockholders may sell the shares through public or private transactions at prevailing market prices, at prices related to such prevailing market prices or at privately negotiated prices. The selling stockholders may also sell shares pursuant to Rule 144 of the Securities Act, if applicable. There can be no assurance that the selling stockholders will sell any or all of the shares offered by them hereunder or otherwise.

The selling stockholders may use broker-dealers to sell the shares. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, or they may receive commissions from the purchasers of shares for whom they acted as agents, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). The selling stockholders and any broker-dealer who participates in the distribution of the shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the shares purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act. Any such commissions, as well as other expenses incurred by the selling stockholders and applicable transfer taxes, are payable by the selling stockholders.

The selling stockholders reserve the right to accept, and together with any agent of the selling stockholder, to reject, in whole or in part, any proposed purchase of the shares of common stock. The selling stockholders will pay any sales commissions or other seller's compensation applicable to such transactions.

We have not registered or qualified offers and sales of shares of the common stock under the laws of any country, other than the United States. To comply with certain states' securities laws, if applicable, the selling stockholders will offer and sell their shares of common stock in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the selling stockholders may not offer or sell shares of common stock unless we have registered or qualified such shares for sale in such states or we have complied with an available exemption from registration or qualification.

The selling stockholders have represented to us that any purchase or sale of shares of common stock by them will comply with Regulation M promulgated under the Exchange Act. In general, Rule 102 under Regulation M prohibits any person connected with a distribution of our common stock (a "Distribution") from directly or indirectly bidding for, or purchasing for any account in which he or she has a beneficial interest, any of our common stock or any right to purchase our common stock, for a period of one business day before and after completion of his or her participation in the distribution (we refer to that time period as the "Distribution Period").

During the Distribution Period, Rule 104 under Regulation M prohibits the selling stockholders and any other persons engaged in the Distribution from engaging in any stabilizing bid or purchasing our common stock except for the purpose of preventing or retarding a decline in the open market price of our common stock. No such person may effect any stabilizing transaction to facilitate any offering at the market. Inasmuch as the selling stockholders will be reoffering and reselling our common stock at the market, Rule 104 prohibits them from effecting any stabilizing transaction in contravention of Rule 104 with respect to our common stock.

13 LEGAL MATTERS

The validity of the shares of common stock offered hereby have been passed upon for us by Olshan Grundman Frome Rosenzweig & Wolosky LLP, 505 Park Avenue, New York, New York 10022. Sam Schwartz, a member of that firm, owns warrants and options to purchase 14,828 shares of our common stock as of the date of this prospectus.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-KSB for the year ended December 31, 2000 have been so incorporated in reliance on the report of Richard A. Eisner & Company, LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us, we have been advised that it is the SEC's opinion that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. 14

NETWORK-1 SECURITY SOLUTIONS, INC.

886,518 SHARES OF COMMON STOCK

PROSPECTUS

June 28, 2001

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by Network-1 Security Solutions, Inc. (the "Company") with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Securities Act of 1933, as amended (the "Securities Act"), are incorporated by reference in, and made a part of, this Registration Statement:

- 1) Our Report on Form 8-K filed with the SEC on June 15, 2001;
- Our Quarterly Report on Form 10-QSB for the quarterly period ended March 31, 2001;
- 3) Our Annual Report on Form 10-KSB for the year ended December 31,

2000; and

4) The description of our common stock incorporated by reference in our Registration Statement on Form 8-A (filed October 9, 1998), as amended on November 3, 1998.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment that indicates that all shares of Common Stock offered hereby have been sold or which deregisters all shares then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporations Law (the "DGCL") contains provisions entitling the Company's directors and officers to indemnification from judgments, fines, amounts paid in settlement, and reasonable expenses (including attorneys' fees) as the result of an action or proceeding in which they may be involved by reason of having been a director or officer of the Company. In its Certificate of Incorporation, the Company has included a provision that limits, to the fullest extent now or hereafter permitted by the DGCL, the personal liability of its directors to the Company or its stockholders for monetary damages arising from a breach of their fiduciary duties as directors. Under the DGCL as currently in effect, this provision limits a director's liability except where such director (i) breaches his duty of loyalty to the Company or its stockholders, (ii) fails to act in good faith or engages in intentional misconduct

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or a knowing violation of law, (iii) authorizes payment of an unlawful dividend or stock purchase or redemption as provided in Section 174 of the DGCL, or (iv) obtains an improper personal benefit. This provision does not prevent the Company or its stockholders from seeking equitable remedies, such as injunctive relief or rescission. If equitable remedies are found not to be available to stockholders in any particular case, stockholders may not have any effective remedy against actions taken by directors that constitute negligence or gross negligence.

The Certificate of Incorporation also includes provisions to the effect that (subject to certain exceptions) the Company shall, to the maximum extent permitted from time to time under the law of the State of Delaware, indemnify, and upon request shall advance expenses to, any director or officer to the extent that such indemnification and advancement of expenses is permitted under such law, as it may from time to time be in effect. In addition, the Bylaws require the Company to indemnify, to the full extent permitted by law, any director, office, employee or agent of the Company for acts which such person reasonably believes are not in violation of the Company's corporate purposes as set forth in the Certificate of Incorporation. At present, the DGCL provides that, in order to be entitled to indemnification, an individual must have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the Company's best interests.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to any charter, provision, by-law, contract, arrangement, statute or otherwise, the Company has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

ITEM 8. EXHIBITS

No. Description

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- 4.1 Certificate of Incorporation, as amended, of the Company. Previously filed as Exhibit 3.1 to the Company's Registration Statement on Form SB-2 (Registration No. 333-59617), declared effective by the Commission on November 12, 1998 (the "1998 Registration Statement"), and incorporated herein by reference.
- 4.2 By-laws of the Company. Previously filed as Exhibit 3.2 to the 1998 Registration Statement, and incorporated herein by reference.
- 4.3 The Company's Amended and Restated 1996 Stock Option Plan. Previously filed as an attachment to the Company's Proxy Statement filed on October 6, 2000, and incorporated herein by reference.
- 5* Opinion of Olshan Grundman Frome Rosenzweig & Wolosky LLP regarding legality of securities being registered.
- 23.1* Consent of Richard A. Eisner & Company, LLP, independent certified public accountants.
- 23.2* Consent of Olshan Grundman Frome Rosenzweig & Wolosky LLP (contained in Exhibit 5).
- 24* Powers of Attorney (included on signature page to this Registration Statement).

* Filed herewith

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ITEM 9. UNDERTAKINGS.

- (a) The undersigned Registrant hereby undertakes that it will:
 - File, during any period in which it offers or sells securities, a post-effective amendment to this Registration Statement to include any additional or changed material information on the plan of distribution.
 - (2) For determining liability under the Securities Act, treat each post-effective amendment as a new Registration Statement of the securities offered, and the offering of securities at that time to be the initial bona fide offering.
 - (3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of this offering.

(b) 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

II-3 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 Waltham, Commonwealth of Massachusetts.

Dated: June 28, 2001

NETWORK-1 SECURITY SOLUTIONS, INC.

By: /s/ Murray P. Fish

Murray P. Fish President and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each director and officer whose signature appears below constitutes and appoints Murray P. Fish, or any of them, his true and lawful attorney-in-fact and agent, with full power and substitution and re-substitution, to sign in any and all capacities any and all amendments or post-effective 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, granting to such attorneys-in-fact and agents, and each of them, full power and authority to do all such other acts and execute all such other documents as they, or any of them, may deem necessary or desirable in connection with the foregoing, as fully as the undersigned might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents, or any of them, 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/ Murray P. Fish Murray P. Fish off	President, Chief Finar - Director (principal exe and principal financial ficer)	cutive officer	June 28, 2001

/s/ Corey M. Horowitz Chairman of the Board of Directors June 28, 2001

Corey M. Horowitz

/s/ Jonathan Mark Director

Jonathan Mark

June 28, 2001

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INDEX TO EXHIBITS

NO. DESCRIPTION

- --- ------

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- 4.2 By-laws of the Company. Previously filed as Exhibit 3.2 to the 1998 Registration Statement, and incorporated herein by reference.
- 4.3 The Company's Amended and Restated 1996 Stock Option Plan. Previously filed as an attachment to the Company's Proxy Statement filed on October 6, 2000, and incorporated herein by reference.
- 5* Opinion of Olshan Grundman Frome Rosenzweig & Wolosky, LLP regarding legality of securities being registered.
- 23.1* Consent of Richard A. Eisner & Company, LLP, independent certified public accountants.
- 23.2* Consent of Olshan Grundman Frome Rosenzweig & Wolosky LLP (contained in Exhibit 5).
- 24* Powers of Attorney (included on signature page to this Registration Statement).
- * Filed herewith

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[LETTERHEAD]

June 25, 2001

Network-1 Security Solutions, Inc. 1601 Trapelo Road, Reservoir Place Waltham, Massachusetts 02451

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel for Network-1 Security Solutions, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission"), with respect to the registration under the Securities Act of 1933, as amended (the "Act"), of an aggregate of 735,000 shares (the "Shares") of common stock, par value \$.01 per share (the "Common Stock"), to be issued pursuant to the Company's Amended and Restated 1996 Stock Option Plan (the "Plan").

In connection with the registration of the Shares, we have reviewed copies of the Registration Statement, the Plan, the Company's Certificate of Incorporation, as amended, the Company's Bylaws, and such documents and records as we have deemed necessary to enable us to express an opinion on the matters covered hereby.

We have also examined and relied upon representations, statements or certificates of public officials and officers and representatives of the Company.

In all such examinations, we have assumed the completeness and authenticity of all records and documents submitted to us as originals and the conformity to original records and documents of all copies submitted to us as reproduced or conformed copies.

OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP

Network-1 Security Solutions, Inc. June 25, 2001 Page 2 of 2 pages

Based upon the foregoing, we are of the opinion that the Shares covered by the Registration Statement, upon the granting of the options described in the Plan and upon delivery of such Shares and payment therefor at the prices and in accordance with the terms stated in the Plan, will be validly issued, fully paid and non-assessable.

A member of this firm holds options to purchase an aggregate of 14,828 Shares.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

We are delivering this opinion to the Company, and no person other than the Company may rely on it.

Very truly yours,

EXHIBIT 23.1

INDEPENDENT AUDITORS' CONSENT

The Board of Directors Network-1 Security Solutions, Inc.

We consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-8 and the reoffer prospectus pertaining to the Network-1 Security Solutions, Inc. amended and restated 1996 stock option plan and to the incorporation by reference therein of our report dated February 21, 2001 with respect to the financial statements of Network-1 Security Solutions, Inc. included in its Annual Report on Form 10-KSB for the year ended December 31, 2000 filed with the Securities and Exchange Commission.

/s/ Richard A. Eisner & Company, LLP

New York, New York June 25, 2001