

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

NETWORK-1 SECURITY SOLUTIONS, INC.  
(Exact Name of Registrant as Specified in its Charter)

DELAWARE

11-3027591

-----  
(State or other  
jurisdiction of incorporation)

-----  
(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)

AVI A. FOGEL  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
NETWORK-1 SECURITY SOLUTIONS, INC.  
1601 TRAPELO ROAD, RESERVOIR PLACE  
WALTHAM, MASSACHUSETTS 02451  
(781) 522-3400

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(Address, including zip code, and telephone number,  
including area code, of agent for service)

COPIES TO:  
SAM SCHWARTZ, ESQ.  
SOLOVAY EDLIN & EISEMAN, P.C.  
845 THIRD AVENUE  
NEW YORK, NEW YORK 10022  
(212) 752-1000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO PUBLIC: As soon as  
practicable after the Registration Statement becomes effective.

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  
1993, 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 registration statement for the same  
offering: ☐ \_\_\_\_\_

If the delivery of the prospectus is expected to be made pursuant to Rule  
434, please check the following box: ☐

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CALCULATION OF REGISTRATION FEE (2)

PROPOSED

TITLE OF SHARES TO BE REGISTERED	MAXIMUM AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE REGISTERED	MAXIMUM AGGREGATE OFFERING PER SHARE (1)	AMOUNT OF REGISTRATION PRICE (1) FEE
Common Stock, par value \$.01 per share.....	3,278,296 shares	\$12.96875	\$42,515,401.25	\$11,224.07

- (1) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457 promulgated under the Securities Act, based on the average of the bid and asked prices for the shares reported on the Nasdaq Stock Market's SmallCap Market on February 1, 2000.
- (2) Pursuant to Rule 416 promulgated under the Securities Act of 1933, as amended, this Registration Statement includes an indeterminate number of additional shares of Common Stock as may from time to time become issuable upon the exercise of certain options by reason of stock splits, stock dividends and other similar transactions.
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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 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not seeking an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS--SUBJECT TO COMPLETION, DATED  
FEBRUARY 4, 2000

PROSPECTUS

NETWORK-1 SECURITY SOLUTIONS, INC.

3,278,296 SHARES OF COMMON STOCK

- o The shares of common stock offered by this prospectus are being sold by the selling stockholders.
- o We will not receive any proceeds from the sale of these shares. We will receive proceeds from the exercise of warrants and options and those proceeds will be used for our general corporate purposes.
- o Our common stock is traded on the Nasdaq Stock Market's SmallCap Market under the symbol "NSSI."
- o On February 2, 2000, the closing bid price for our common stock was \$14.375.

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 5 OF THIS PROSPECTUS.

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.

\_\_\_\_\_, 2000

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## SUMMARY

### THE COMPANY

Network-1 Security Solutions, Inc. develops, markets, licenses and supports 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) family of security software products can reside anywhere on the enterprise network and provides multiple layers of defense to protect data from both external attack as well as access abuse by such "trusted insiders" as employees, subcontractors or consultants. Our CYBERWALLPLUS(TM) suite of products was first introduced in March 1999 and evolved from our prior FIREWALL/PLUS suite of security software products. We also offer our customers a full range of consulting services in network security and network design and support in order to build, maintain and enhance customer relationships and increase the demand for our software products.

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). We have positioned our CYBERWALLPLUS(TM) products as an enabling technology designed to capitalize on the significant network security opportunity within the explosive E-Business marketplace. Our CYBERWALLPLUS(TM) family of network security products operates on the Microsoft Windows NT operating system platform. CYBERWALLPLUS(TM) filter engine software technology, with its unique 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. It can be deployed at the perimeter to control access to and from the Internet, between internal networks as well as 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 network's, "islands of isolation," and by 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 network segments and inside the server itself - finally allowing

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corporations to leverage the promise of electronic business, while ensuring the safety of strategic data assets.

We are currently pursuing an aggressive growth strategy focusing our

efforts on marketing our CyberwallPLUS(TM) family of network security products. Key elements of our strategy are to:

- o Provide comprehensive network security solutions by developing, marketing and supporting a family of network security products designed to address a broad range of security issues confronting computer networks and computing, including protecting data throughout an enterprise, such as between the internal network segments and inside servers.
- o Emphasize the distinguishing characteristics of the CYBERWALLPLUS(TM) technology, which can reside anywhere on the enterprise network, and inspect, detect and protect access to sensitive corporate data for a multitude of network protocols. Unlike traditional firewalls, which protect organizations from external attacks, cyberwalls protect networks from abuses by those with "inside access" as well.
- o Implement a marketing plan which includes a multi-channel distribution strategy which emphasizes establishing and maintaining third-party distributor relationships with systems integrators, VARs, OEMs and resellers in the United States and internationally.
- o Increase sales of CYBERWALLPLUS(TM) by leveraging relationships with consulting clients.

Since our inception, we have incurred significant losses. Our future success is largely dependent upon our CYBERWALLPLUS(TM) family of software products achieving broad market acceptance. We may not be able to successfully implement our marketing strategy, achieve significant revenues and market acceptance of our CYBERWALLPLUS(TM) family of software products, or achieve profitable operations. See "Risk Factors."

Network-1 was 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 at that address is (781) 522-3400. Our web site can be found at <http://www.network-1.com>.

## RECENT DEVELOPMENTS

On December 22, 1999, we signed a Securities Purchase Agreement for the private sale of \$3,000,000 of preferred stock, warrants and notes to a group of 39 investors. In

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this transaction we issued 491,803 shares of our Series D Preferred Stock at \$3.05 per share and warrants to purchase 491,803 shares of our common stock at an exercise price of \$3.00 per share, subject to certain adjustments. We also issued convertible promissory notes in the principal amount of \$1.5 million at an interest rate of 8% per year. Subject to stockholder approval, the promissory notes are convertible into an additional 491,803 shares of our Series D Preferred Stock (up to 570,492 shares if you include potential interest under such notes) and warrants to purchase an additional 491,803 shares of our common stock (up to 570,492 shares if you include potential interest under such notes) at an exercise price of \$3.00 per share, subject to certain adjustments. Each share of our Series D Preferred Stock is convertible into one share of our common stock, subject to certain adjustments.

The resale by the selling stockholders of the shares of our common stock underlying the Series D Preferred Stock and the warrants has been registered under the Securities Act of 1933, as amended, and such shares of common stock may be freely sold.

The following is a summary of material terms of the promissory notes and warrants issued in the financing:

## CONVERTIBLE PROMISSORY NOTES

The principal amount of the notes, along with the accrued interest, is due on December 22, 2001. The notes have an interest rate of 8% per annum.

An "event of default" under the notes will occur if, among other things, we (1) fail to pay interest or principal when due, or (2) breach any of our representations or warranties under the Securities Purchase Agreement. Upon an event of default, the entire indebtedness and accrued interest may become immediately due and payable. We may prepay any amount outstanding under the notes at any time beginning May 22, 2001.

Subject to stockholders' approval, as described below, all or any part of the principal amount of the notes may be converted into shares of our Series

D Preferred Stock and five-year warrants to purchase shares of our common stock. If a holder of a note elects to convert it, the holder will receive the number of shares of our Series D Preferred Stock and warrants determined by dividing the principal amount of that portion of the note being converted (plus accrued and unpaid interest) by \$3.05. The conversion price and the number of shares received upon conversion may be adjusted in the event of a stock split, dividend, recapitalization, reorganization, merger, consolidation or sale of our assets, or the issuance by us of shares of our common stock at a price less than the then adjusted conversion price.

We are required to seek stockholder approval for the conversion of the notes at our next annual meeting of stockholders, or upon the written request of holders of more than 50% of the principal amount of outstanding indebtedness issued pursuant to the Securities Purchase Agreement, whichever comes first. If the stockholders do not approve the conversion, then the notes will not be convertible and the interest rate on the notes will increase to 12% per annum.

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## WARRANTS

At any time until December 22, 2004, the holder of a warrant is entitled to purchase the number of shares of our common stock listed in such warrant, at a price of \$3.00 per share, which may be adjusted based on the level of certain revenues we achieve during the three-month period ending March 31, 2000. The exercise price and the number of shares received upon exercise may also be adjusted in the event of a stock split, dividend, recapitalization, reorganization, merger, consolidation or sale of our assets, or the issuance by us of shares of our common stock at a price less than the then adjusted exercise price.

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## RISK FACTORS

THE SHARES OFFERED HEREBY ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK. EACH PROSPECTIVE INVESTOR SHOULD CAREFULLY CONSIDER THE FOLLOWING RISK FACTORS BEFORE MAKING AN INVESTMENT DECISION.

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 approximately \$18,347,000 as of September 30, 1999. For the nine months ended September 30, 1999 and the fiscal years ended December 31, 1998 and 1997, we incurred losses of \$5,100,000, \$5,777,000 and \$2,390,000, respectively. We have financed our operations primarily through the sales of equity and debt securities. 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 operations will depend on our positive cash flow, if any, from future operations or our ability to raise additional funds through equity or debt financing. In December 1999, we consummated a private financing of \$3.0 million of equity and debt in order to obtain the working capital necessary to continue to finance our operations and execute our business plan. See "Recent Developments." Although we anticipate that future revenues and our current cash balance will be sufficient to fund our operations and capital requirements until approximately May 2000, we cannot give you any assurance that we will not need additional funds before such time. We have no current arrangements for additional financing and we may not be able to obtain additional financing on commercially reasonable terms, if at all. We could be required to cut back or stop operations if we are unable to raise or obtain funds when needed.

#### WE HAVE HAD A LIMITED OPERATING HISTORY AS A SOFTWARE PRODUCT COMPANY AND LACK ANY SUBSTANTIAL REVENUE.

We have a limited operating history as a software product company and have made only limited sales of our products. Our total revenues for software licenses for the year ended December 31, 1998 and for the nine months ended September 30, 1999 were \$569,000 and \$186,000, respectively. The majority of our revenues to date have been derived from consulting services.

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#### 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 largely 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 September 30, 1999, license revenue from software products has been \$2,848,000 including a non-refundable pre-paid royalty of \$500,000 in 1997. Since the introduction of our CYBERWALLPLUS(TM) suite of products in January 1999 through September 30, 1999, license revenue from our CYBERWALLPLUS(TM) products was only \$127,000. 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.

#### 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 in general 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

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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 the Company's 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 AFFECTED.

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 analysts' and investors' expectations in some future quarters, which would likely have a material adverse effect on our common stock's price.

WE ARE DEPENDENT ON A FEW KEY PERSONNEL AND WE NEED TO ATTRACT AND RETAIN HIGHLY QUALIFIED TECHNICAL, SALES, MARKETING, DEVELOPMENT AND MANAGEMENT PERSONNEL.

Our success is largely dependent on the continued service of key technical and senior management personnel. The loss of the services of one or more of our key employees, in particular Avi A. Fogel, our President and Chief Executive Officer, or Robert P. Olsen, our Vice President of Marketing, could have a material adverse effect on our business, operating results and financial condition. We have employment agreements with Messrs. Fogel and Olsen that expire in May 2002 and May 2001, respectively.

Our success will also depend on our ability to attract, train and retain highly qualified technical, sales, marketing, development and 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.

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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 affected if we fail to do any of the foregoing.

WE CAN BE EXPOSED TO NUMEROUS POTENTIAL LIABILITY CLAIMS FOR DAMAGES 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 license agreements designed to limit our exposure will be enforceable. In addition, our consulting engagements often involve development, implementation and maintenance of networking systems that are critical to the operations of a client's business. Our failure to meet a client's expectations in the performance of our services could harm our reputation or result in a claim for damages. 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.

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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. 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.

In addition, if our common stock were to become delisted from trading on Nasdaq and the trading price of the common stock were to fall 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 the date of this prospectus, there are outstanding (1) options and warrants to purchase an aggregate of 2,743,747 shares of our common stock at exercise prices ranging from \$1.50 to \$9.66, (2) 491,803 shares of Series D Convertible Preferred Stock which are convertible at any time into an equal number of shares of our common stock and (3) debt in the principal amount of \$1,500,000 which, subject to stockholder approval, can be converted into 491,803 shares of our Series D Preferred Stock (up to 570,492 shares if you include potential interest under the promissory notes) and warrants to purchase 491,803 shares of our common stock (up to 570,492 shares if you include potential interest under the promissory notes) at an exercise price of \$3.00 per share, subject to adjustment. 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.

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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 491,803 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.

#### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current 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 at 450 Fifth Street, N.W., Washington, D.C. 20549. The SEC has prescribed rates for copying. You may obtain 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 you on the SEC's Internet site at <http://www.sec.gov>.

This prospectus is part of a Registration Statement on Form S-3 (the "Registration Statement") filed by us with the SEC under the Securities Act and therefore omits certain information in the 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.

#### 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 part of this prospectus, and information that we file later with the SEC will automatically update and supersede 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 Exchange Act:

1. our Annual Report on Form 10-KSB for the year ended December 31, 1998 (filed April 14, 1999);
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2. our Quarterly Report on Form 10-QSB for the quarter ended March 31, 1999 (filed May 13, 1999);
3. our Quarterly Report on Form 10-QSB for the quarter ended June 30, 1999 (filed August 13, 1999);
4. our Quarterly Report on Form 10-QSB for the quarter ended September 30, 1999 (filed November 15, 1999);
5. our Current Report on Form 8-K (filed January 5, 2000); and
6. 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. You should direct such requests to us at 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451, Attention: Murray Fish, Chief Financial Officer, telephone number (781) 522-3400.

You should rely only on the information and representations provided in this prospectus or on the information incorporated by reference in this prospectus. Neither we nor the selling stockholders have authorized anyone to provide you with different information. Neither we nor the selling stockholders are making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of this document.

#### 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

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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.

#### USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. All proceeds from the sale of such shares will be for the accounts of the selling stockholders. We will receive approximately \$7,154,150 in proceeds (up to approximately \$7,390,000 if interest on the notes is converted) equal to the exercise price of the warrants and options, if the holders of the warrants and options exercise such securities into shares of common stock. Any proceeds that we may receive upon exercise of the warrants and options will be used for working capital purposes.

#### SELLING STOCKHOLDERS

The following table sets forth information, as of February 3, 2000, with respect to the common stock beneficially owned by each selling stockholder. The selling stockholders are not obligated to sell any of the shares offered by this prospectus. The number of shares sold by each selling stockholder may depend on a number of factors, such as the market price of our common stock.

We are registering 3,278,296 shares of our common stock for resale by the selling stockholders in accordance with registration rights previously granted to them. We agreed to file a registration statement under the Securities Act with the SEC, of which this prospectus is a part, with respect to the resale of:

- o an aggregate of 336,007 shares that we may issue to certain individuals and entities that had provided services to us upon their exercise of warrants we issued between April 4, 1994 and July 1, 1998;
- o 170,000 shares that we may issue to Whale Securities Co., L.P. upon the exercise of warrants we issued for underwriting services they provided in our initial public offering consummated on November 17, 1998;
- o 294,879 shares that we may issue to Avi Fogel, our President and Chief Executive Officer, upon the exercise of options we granted to him on May 18, 1998;
- o 206,933 shares that we issued to Pisces Investors, L.P. in connection with a private placement in April 4, 1994;
- o 145,887 shares that we issued to Security Partners, L.P. in connection with the conversion of

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outstanding indebtedness on March 21, 1996;

- o an aggregate of 491,803 shares that we may issue upon conversion of the Series D Preferred Stock issued in December 1999;
- o an aggregate of 491,803 shares that we may issue upon the exercise of warrants issued in connection with the Series D Preferred Stock offering;
- o an aggregate of 491,803 shares that we may issue upon conversion of the Series D Preferred Stock underlying the promissory notes issued in the Series D Preferred Stock offering;
- o up to an aggregate of 78,689 additional shares that we may issue upon the conversion of the Series D Preferred Stock underlying the potential interest under such promissory notes;
- o an aggregate of 491,803 shares that we may issue upon the exercise of warrants underlying the promissory notes issued in the Series D Preferred

Stock offering; and

o up to an aggregate of 78,689 additional shares that we may issue upon the exercise of the warrants underlying the potential interest under such promissory notes.

The number of shares shown in the following table as being offered by the selling stockholders do not include such presently indeterminate number of additional shares of our common stock that may be issuable as a result of stock splits, stock dividends and similar transactions. Pursuant to Rule 416 under the Securities Act, however, such shares are included in the Registration Statement of which this prospectus is a part.

The selling stockholders may sell any or all of their shares listed below from time to time. Accordingly, we cannot estimate how many shares the selling stockholders will own upon consummation of any such sales. Also, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of their shares since the date on which the information was provided, in transactions exempt from the registration requirements of the Securities Act.

Except as indicated in this prospectus, none of the selling stockholders has had a material relationship with us within the past three years other than as a result of the ownership of our securities.

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<TABLE>

<CAPTION>

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SHARES BENEFICIALLY OWNED AFTER OFFERING(1)(2)	PERCENTAGE OF OUTSTANDING COMMON STOCK AFTER OFFERING(1)
<S>	<C>	<C>	<C>	<C>
Barry Rubenstein Wheatley Partners II, L.P. Woodland Venture Fund Seneca Ventures Woodland Partners Brookwood Partners, L.P.	1,667,845 (3)	377,528	1,290,317	25.98%
Irwin Lieber	1,364,425 (4)	115,236	1,249,189	25.15%
Barry Fingerhut	1,291,271 (5)	65,572	1,225,699	24.84%
Jonathan Lieber Applegreen Partners	1,214,155 (6)	16,392	1,197,763	24.27%
Corey M. Horowitz CMH Capital Management Corp. Pisces Investors, L.P. Security Partners, L.P.	1,143,689 (7)	641,692	501,997	10.11%
Avi A. Fogel	360,710 (8)	327,667	33,043	*
Whale Securities Co., L.P.	170,000 (9)	170,000	0	0
Gerald Josephson	131,148 (10)	131,148	0	0
Eli Oxenhorn	115,236 (11)	115,236	0	0
New Dimensions Trading Limited	98,360 (12)	98,360	0	0
Phil Bloom	98,360 (12)	98,360	0	0
Dalewood Associates, L.P.	65,572 (13)	65,572	0	0
Alan Silverman	65,572 (13)	65,572	0	0
Aaron Wolfson	65,572 (13)	65,572	0	0
GER Family Partners, Ltd.	65,572 (13)	65,572	0	0
Gordon Freeman	65,572 (13)	65,572	0	0
MW Partnership	49,180 (14)	49,180	0	0

</TABLE>

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&lt;CAPTION&gt;

&lt;S&gt;

	<C>	<C>	<C>	<C>	<C>
Jeffrey Rubenstein	42,624 (15)	42,624	0	0	
Jim McNeil	37,248 (16)	37,248	0	0	
David Thalheim	32,788 (17)	32,788	0	0	
Abraham Wolfson	32,788 (17)	32,788	0	0	
Gyenes & Co.	32,788 (17)	32,788	0	0	
Jack Erlanger	32,788 (17)	32,788	0	0	
Larry Altman	32,788 (17)	32,788	0	0	
Maurice Shamah	32,788 (17)	32,788	0	0	
Richard Rosenstock	32,788 (17)	32,788	0	0	
Sandler Co-Investment Partners, LP	32,788 (17)	32,788	0	0	
Stephen S. Wien	32,788 (17)	32,788	0	0	
William Walters	32,788 (17)	32,788	0	0	
Rebecca Rubenstein	26,236 (18)	26,236	0	0	
Brian Rubenstein	22,960 (19)	22,960	0	0	
MLPF&S as Custodian FBO Emanuel R. Pearlman, IRA	21,392 (20)	16,392	5,000	*	
Abby Oxenhorn	16,392 (21)	16,392	0	0	
Levitin Family Charitable Trust	16,392 (21)	16,392	0	0	
Patrick McBrien	16,392 (21)	16,392	0	0	
Seth Oxenhorn	16,392 (21)	16,392	0	0	
Scott Zelnick	16,392 (21)	16,392	0	0	
Alan Kaufman	9,312 (22)	9,312	0	0	
Brad Zelnick	6,556 (23)	6,556	0	0	
Venture Strategies, Inc.	6,207 (24)	6,207	0	0	
Sam Schwartz	5,728 (25)	2,328	3,400	*	
Irving Bizar	2,328 (26)	2,328	0	0	

&lt;/TABLE&gt;

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&lt;S&gt;

	<C>	<C>	<C>	<C>	<C>
Malcolm Taub	2,328 (26)	2,328	0	0	
Roy Martin	2,328 (26)	2,328	0	0	

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&lt;/TABLE&gt;

\* Less than 1%

(1) Percentage of beneficial ownership is calculated assuming 4,935,211 shares of common stock were outstanding. Ownership after this offering assumes that the selling stockholder sold all of the shares it is offering in this prospectus. Beneficial ownership is determined in accordance with the rules of the SEC and the footnotes to this table, and generally includes voting or investment power with respect to securities. Therefore, more than one person may be deemed to beneficially own the same shares. Shares of common stock that are subject to options, warrants or convertible securities that are exercisable or convertible within 60 days are deemed outstanding for computing the percentage of the person holding such option or warrant but are not deemed outstanding for computing the percentage of any other person. For purposes of calculating shares deemed outstanding pursuant to the previous sentence, (a) we have deemed as outstanding 491,803 shares of Series D Preferred Stock and warrants to purchase 491,803 shares of our

common stock, which are issuable upon conversion of outstanding promissory notes issued by us in the aggregate principal amount of \$1,500,000 and (b) we have not deemed as outstanding any shares of Series D Preferred Stock or warrants to purchase shares of our common stock which would be issuable upon conversion of the interest on such notes. The conversion of such promissory notes is subject to approval by our stockholders at a duly held stockholders' meeting expected to be held within 60 days of the effective date of this Registration Statement.

- (2) Beneficial ownership of shares held by the selling stockholder after this offering will depend on the number of securities sold by the selling stockholder in this offering.
- (3) Includes (i) 31,250 shares of common stock subject to currently exercisable stock options held by Mr. Rubenstein, (ii) 49,664 shares of common stock subject to currently exercisable warrants held by Mr. Rubenstein (which shares are being registered hereby), (iii) 1,194,659, 41,128 and 23,280 shares of common stock held by Wheatley Partners II, L.P., Woodland Venture Fund and Seneca Ventures, respectively, (iv) 32,787, 16,393, 16,393 and 16,393 shares of common stock subject to currently exercisable warrants held by Woodland Venture Fund, Seneca Ventures, Woodland Partners and Brookwood Partners, L.P., respectively (which shares are being registered hereby), (v) 32,787, 16,393, 16,393 and 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock held by Woodland Venture Fund, Seneca Ventures, Woodland Partners and Brookwood Partners, L.P., respectively (which shares are being registered hereby), (vi) 32,787, 16,393, 16,393 and 16,393 shares of common stock subject to currently exercisable warrants underlying certain promissory notes held by Woodland Venture Fund, Seneca Ventures, Woodland Partners and Brookwood Partners,

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L.P., respectively (which shares are being registered hereby) and (vii) 32,787, 16,393, 16,393 and 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes held by Woodland Venture Fund, Seneca Ventures, Woodland Partners and Brookwood Partners, L.P., respectively (which shares are being registered hereby). 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 and Brookwood Partners, L.P. Barry Rubenstein is a general partner of Wheatley Partners II, L.P. Does not include 6,250 shares of common stock subject to stock options held by Mr. Rubenstein which are not currently exercisable. 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. The address of Barry Rubenstein is 68 Wheatley Road, Brookville, New York 11545. The address for Wheatley Partners II, L.P., Woodland Venture Fund, Seneca Ventures, Woodland Partners and Brookwood Partners, L.P. is c/o Barry Rubenstein, 68 Wheatley Road, Brookville, New York 11545.

- (4) Includes (i) 31,250 shares of common stock subject to currently exercisable stock options held by Mr. Lieber, (ii) 66,057 shares of common stock subject to currently exercisable warrants held by Mr. Lieber (which shares are being registered hereby), (iii) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock held by Mr. Lieber (which shares are being registered hereby), (iv) 16,393 shares of common stock subject to currently exercisable warrants underlying certain promissory notes held by Mr. Lieber (which shares are being registered hereby), (v) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes held by Mr. Lieber (which shares are being registered hereby), and (vi) 1,194,659 shares of common stock held by Wheatley Partners II, L.P., of which Mr. Lieber is a general partner. Does not include 6,250 shares of common stock subject to stock options held by Mr. Lieber which are not currently exercisable. 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.
- (5) Includes (i) 16,393 shares of common stock subject to currently exercisable warrants held by Mr. Fingerhut (which shares are being registered hereby), (ii) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock held by Mr. Fingerhut (which shares are being registered hereby), (iii) 16,393 shares of common stock subject to currently exercisable warrants underlying certain promissory notes held by Mr. Fingerhut (which shares are being registered hereby), (iv) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes held by Mr. Fingerhut (which shares are being registered hereby) and (v) 1,194,659 shares of common stock held by Wheatley Partners II, L.P., of which Mr. Fingerhut is a general partner. Mr. Fingerhut 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.

- (6) Includes (i) 4,098 shares of common stock subject to currently exercisable warrants held by

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Mr. Lieber (which shares are being registered hereby), (ii) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock held by Mr. Lieber (which shares are being registered hereby), (iii) 4,098 shares of common stock subject to currently exercisable warrants underlying certain promissory notes held by Mr. Lieber (which shares are being registered hereby), (iv) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes held by Mr. Lieber (which shares are being registered hereby) and (v) 1,194,659 shares of common stock held by Wheatley Partners II, L.P., of which Mr. Lieber is a general partner. 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.

- (7) Includes (i) 382,752 shares of common stock held by Mr. Horowitz, (ii) 31,250 shares of common stock subject to currently exercisable stock options held by Mr. Horowitz, (iii) 206,933 shares of common stock held by Pisces Investors, L.P., a limited partnership whose general partner is CMH Capital Management Corp., a corporation whose sole stockholder and officer is Mr. Horowitz (which shares are being registered hereby), (iv) 145,887 shares of common stock owned by Security Partners, L.P., a limited partnership whose general partner is CMH and one of whose limited partners is Mr. Horowitz (which shares are being registered hereby), (v) 87,995 shares of common stock held by CMH, (vi) 124,936 shares of common stock subject to currently exercisable warrants held by CMH (which shares are being registered hereby), (vii) 40,984 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz (which shares are being registered hereby), (viii) 40,984 shares of common stock issuable upon conversion of Series D Preferred Stock held by Mr. Horowitz (which shares are being registered hereby), (ix) 40,984 shares of common stock subject to currently exercisable warrants underlying certain promissory notes held by Mr. Horowitz (which shares are being registered hereby) and (x) 40,984 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes held by Mr. Horowitz (which shares are being registered hereby). Does not include 6,250 shares of common stock subject to stock options which are not currently exercisable. Mr. Horowitz disclaims beneficial ownership of the shares held by Pisces Investors, L.P. and Security Partners, L.P., except to the extent of his equity interest therein. The address of CMH Capital Management Corp. is 885 Third Avenue, New York, New York 10022 and the address of Pisces Investors, L.P. and Security Partners, L.P. is c/o CMH Capital Management Corp., 885 Third Avenue, New York, New York 10022.

- (8) Includes (i) 165,132 shares of common stock subject to currently exercisable stock options (which shares are being registered hereby), (ii) 129,747 shares of common stock subject to stock options which are not currently exercisable (which shares are being registered hereby), (iii) 8,197 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (iv) 8,197 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (v) 8,197 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (vi) 8,197 shares of common stock issuable

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upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby). The address of Mr. Fogel is c/o Network-1 Security Solutions, Inc., 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451.

- (9) Includes 170,000 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby).
- (10) Includes (i) 32,787 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 32,787 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 32,787 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 32,787 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).

- (11) Includes (i) 66,057 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 16,393 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (12) Includes (i) 24,590 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 24,590 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 24,590 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 24,590 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (13) Includes (i) 16,393 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 16,393 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 16,393 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (14) Includes (i) 12,295 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 12,295 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 12,295 shares of common stock subject to currently exercisable warrants underlying certain

promissory notes (which shares are being registered hereby) and (iv) 12,295 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).

- (16) Includes 37,248 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby).
- (17) Includes (i) 8,197 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 8,197 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 8,197 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 8,197 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (18) Includes (i) 6,559 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 6,559 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 6,559 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 6,559 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (19) Includes (i) 5,740 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 5,740 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 5,740 shares of common stock

subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 5,740 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).

- (20) Includes (i) 5,000 shares of common stock subject to currently exercisable options, (ii) 4,098 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (iii) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iv) 4,098 shares of

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common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (v) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby). Does not include 15,000 shares of common stock subject to options not currently exercisable.

- (21) Includes (i) 4,098 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 4,098 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 4,098 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (22) Includes 9,312 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby).
- (23) Includes (i) 1,639 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), (ii) 1,639 shares of common stock issuable upon conversion of Series D Preferred Stock (which shares are being registered hereby), (iii) 1,639 shares of common stock subject to currently exercisable warrants underlying certain promissory notes (which shares are being registered hereby) and (iv) 1,639 shares of common stock issuable upon conversion of Series D Preferred Stock underlying certain promissory notes (which shares are being registered hereby).
- (24) Includes 6,207 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby).
- (25) Includes (i) 2,328 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby), and (ii) 3,400 shares of common stock subject to currently exercisable stock options. Does not include 6,600 shares of common stock subject to stock options which are not currently exercisable. This selling stockholder is a member of the law firm of Solovay Edlin & Eiseman, P.C., our outside legal counsel.
- (26) Includes 2,328 shares of common stock subject to currently exercisable warrants (which shares are being registered hereby).

#### PLAN OF DISTRIBUTION

This prospectus relates to the offer and sale by the selling stockholders of:

- o an aggregate of 506,007 shares of our common stock that we may issue upon the exercise

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of outstanding warrants issued for certain services;

- o 294,879 shares of our common stock that we may issue upon the conversion of outstanding options;
- o an aggregate of 352,820 shares of our common stock that we issued to Pisces Investors, L.P. and Security Partners, L.P.;
- o an aggregate of 983,606 shares of our common stock that we may issue upon the exercise of outstanding warrants and conversion of outstanding shares of Series D Preferred Stock issued by us in a private placement;
- o an aggregate of 983,606 shares of our common stock that we may issue



upon the exercise of warrants and the conversion of shares of Series D Preferred Stock underlying outstanding promissory notes; and

- o up to an aggregate of 157,378 additional shares of our common stock that we may issue upon the exercise of warrants and the conversion of shares of Series D Preferred Stock underlying the potential interest under such promissory notes.

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.

The selling stockholders may use underwriters or broker-dealers to sell the shares. Such underwriters and broker-dealers may receive compensation in the form of discounts 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 underwriter or 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.

Under applicable rules and regulations under the Exchange Act, any person engaged in a distribution of the shares may not simultaneously engage in market-making activities with respect to our common stock for a certain period of time, except under certain limited circumstances. Also, without limiting the foregoing, each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and rules and regulations thereunder (including Regulation M), which provisions may limit the timing of purchases and sales of shares of our common stock by such selling stockholder.

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, including the names of any underwriters, dealers or agents, the purchase price paid by any underwriter for the

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shares, and any discounts or commissions.

In order to comply with the securities laws of certain states, if applicable, the shares will be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

We have agreed to pay substantially all of the expenses incident to the registration, offering and sale of the shares to the public, excluding the commissions or discounts of underwriters, broker-dealers or agents.

#### LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Solovay Edlin & Eiseman, P.C., New York, New York. Sam Schwartz, a member of that firm, owns warrants and options to purchase 12,328 shares of our common stock as of the date of this prospectus.

#### EXPERTS

The financial statements on Form 10-KSB for the year ended December 31, 1998 incorporated by reference in this registration statement have been audited by Richard A. Eisner & Company, LLP, independent public accountants, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in accounting and auditing in giving said report.

#### 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.

NETWORK-1 SECURITY SOLUTIONS, INC.

3,278,296 SHARES  
OF  
COMMON STOCK

-----  
PROSPECTUS  
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\_\_\_\_\_, 2000

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the expenses in connection with the offering described in the Registration Statement, all of which will be borne by the Company.

SEC registration fee.....	\$ 11,224.07
Legal fees and expenses*.....	_____
Accounting fees and expenses*.....	_____
Miscellaneous expenses*.....	_____
TOTAL.....	\$ _____

\* Estimated.

ITEM 15. 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 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

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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, officer, 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 Act and is, therefore, unenforceable.

## ITEM 16. EXHIBITS

### NO. DESCRIPTION

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- 3.1 Certificate of Incorporation, as amended (includes Form of Certificate of Designations of Series C Preferred Stock). Previously filed as Exhibit 3.1 to the Company's Registration Statement on Form SB-2 (Registration No. 333-59617), declared effective by the SEC in November 1998 (the "1998 Registration Statement"), and incorporated herein by reference.
- 3.2 Certificate of Designations of Series D Preferred Stock.. Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed January 4, 2000 (the "Form 8-K"), and incorporated herein by reference.
- 3.3 By-laws, as amended. Previously filed as Exhibit 3.2 to the 1998 Registration Statement and incorporated herein by reference.
- 4.1 Form of Common Stock certificate. Previously filed as Exhibit 4.1 to the 1998 Registration Statement and incorporated herein by reference.
- 4.2 Warrant issued as of November 17, 1998 to Whale Securities Co., L.P. Previously filed as Exhibit 1.2 to the 1998 Registration Statement and incorporated herein by reference.
- 4.3\* Form of Warrant previously issued for services rendered.
- 5.1\* Opinion of Solovay Edlin & Eiseman, P.C. regarding legality of securities being registered.
- 10.1 Securities Purchase Agreement, dated as of December 22, 1999, between the Company and the investors listed therein. Previously filed as Exhibit 10.28 to the Form 8-K and incorporated herein by reference.
- 10.2 Form of Convertible Promissory Note, dated December 22, 1999, made by the Company in

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favor of the holder listed thereon. Previously filed as Exhibit C to Exhibit 10.28 to the Form 8-K and incorporated herein by reference.

- 10.3 Form of Warrant, dated December 22, 1999, issued by the Company to the holder listed thereon. Previously filed as Exhibit B to Exhibit 10.28 to the Form 8-K and incorporated herein by reference.
- 21.1 List of the Company's subsidiaries. Previously filed as Exhibit 21.1 to the 1998 Registration Statement and incorporated herein by reference.
- 23.1\* Consent of Richard A. Eisner & Company, LLP, independent certified public accountants.
- 24.1 No person has signed this Registration Statement under a power of attorney. A power of attorney relating to the signing of amendments hereto is incorporated in the signature pages hereof.

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\* To be filed by amendment

ITEM 17. UNDERTAKINGS

(1) The undersigned Registrant hereby undertakes that it will:

(a) File, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement to include any additional or changed material information on the plan of distribution.

(b) For determining liability under the 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.

(c) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of this offering.

(2) Insofar as indemnification for liabilities arising under the 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 Act and is, therefore, unenforceable.

(3) The undersigned Registrant hereby undertakes that it will:

(a) For determining any liability under the Securities Act, treat the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1)

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or (4), or 497(h) under the Securities Act as part of this registration statement as of the time the Commission declared it effective.

(b) For determining any liability under the Securities Act, treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and the offering of such securities at that time as the initial BONA FIDE offering of those securities.

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SIGNATURES  
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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 Waltham, State of Massachusetts.

Dated: February 4, 2000

NETWORK-1 SECURITY SOLUTIONS, INC.

By: /s/ Avi A. Fogel

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Avi A. Fogel, President and  
Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each director and officer whose signature appears below constitutes and appoints Avi A. Fogel and 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-3 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:

<TABLE><CAPTION>

Signature ----- <S>	Title ----- <C>	Date ----- <C>
/s/ Avi A. Fogel ----- Avi A. Fogel	President, Chief Executive Officer and Director (principal executive officer)	February 4, 2000
/s/ Murray P. Fish ----- Murray P. Fish	Chief Financial Officer (principal financial officer and principal accounting officer)	February 4, 2000
/s/ William H. Hancock ----- William H. Hancock	Chief Technology Officer and Director	February 4, 2000
/s/ Corey M. Horowitz ----- Corey M. Horowitz	Chairman of the Board of Directors	February 4, 2000

</TABLE>

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#### INDEX TO EXHIBITS

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