#### TRIMBLE NAVIGATION LTD /CA/

Form S-3

January 18, 2002

As filed with the Securities and Exchange Commission on January 18, 2002

Registration No. 333-\_\_

\_\_\_\_\_\_

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
Under

The Securities Act of 1933

TRIMBLE NAVIGATION LIMITED (Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation or organization)

94-2802192 (I.R.S. Employer Identification Number)

645 North Mary Avenue Sunnyvale, California 94088 (408) 481-8000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Steven W. Berglund
President and Chief Executive Officer
Trimble Navigation Limited
645 North Mary Avenue
Sunnyvale, California 94088
(408) 481-8000

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

Copies to:
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650 Page Mill Road
Palo Alto, CA 94304
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

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

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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434,

please check the following box. [ ]

#### CALCULATION OF REGISTRATION FEE

	=======================================	=====
	Proposed	
Amount	Offering	
to be	Price	
Registered	Per Share	
3,063,341	\$15.09(1)	\$
612 672	¢10, 475,(2)	
012,072	AT2.417(7)	?
3,676,013		\$
	to be Registered  3,063,341  612,672	Amount Offering Price Registered Per Share  3,063,341 \$15.09(1)  612,672 \$19.475(2)

- (1) The Proposed Maximum Offering Price Per Share is estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended, using the average of the high and low price reported by the Nasdaq National Market for the common stock on January 16, 2002, which was approximately \$15.09 per share.
  - (2) The Proposed Maximum Offering Price Per Share was determined in accordance with Rule 457(g) under the Securities Act of 1933, as amended, under which rule the per share price is estimated by reference to the exercise price of the securities, which is \$19.475.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek and offer to buy these securities in any jurisdiction where the offer of sale is not permitted.

Subject to Completion, Dated January 18, 2002

Prospectus

Trimble Navigation Limited

3,676,013 Shares

Common Stock

This prospectus relates to 3,676,013 shares of our common stock, no par value, which may be sold from time to time by the selling shareholders named herein, or their transferees, pledges, donees or successors. These shares include 612,672 shares that are issuable upon the exercise of outstanding warrants. The shares were initially sold, and the warrants were initially issued, in private placement transactions in December 2001 and January 2002.

The shares are being registered to permit the selling shareholders to sell the shares from time to time in the public market. The shareholders may sell the common stock through ordinary brokerage transactions, directly to market makers of our shares or through any other means described in the section beginning on page 10 titled "Plan of Distribution." We cannot assure you that the selling shareholders will sell all or any portion of the common stock offered hereby. We will not receive any of the proceeds from this offering, although we have paid the expenses of preparing this prospectus and the related Registration Statement.

Shares of our common stock are quoted on the Nasdaq National Market under the symbol "TRMB." The last reported sale price of the common stock on January 17, 2002, was \$15.15 per share.

We are a California corporation formed in January 1981. Our principal executive offices are located at 645 North Mary Ave., Sunnyvale, California and our telephone number is (408) 481-8000.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 3 to read about risk factors you should consider before purchasing our common stock.

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.

The date of this prospectus is \_\_\_\_\_, 2002.

You should rely only on the information incorporated by reference or provided in this prospectus or a prospectus supplement or amendment. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume the information in this prospectus or a prospectus supplement or amendment is accurate as of any date other than the date on the front of the documents.

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Some of the statements under "Risk Factors" and elsewhere in this prospectus constitute forward-looking statements. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward looking statements. In some cases, you can identify forward looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative terms or other comparable terminology. In evaluating these statements, you should specifically consider various factors, including the risks outlined under "Risk Factors."

Although we believe that the expectations in the forward-looking statements contained in this prospectus are reasonable we cannot guarantee future results, levels of activity, performance achievements. You should not place undue reliance on these forward-looking statements.

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#### ABOUT TRIMBLE

Trimble Navigation Limited, a California corporation, develops, manufactures and distributes innovative products enabled by Global Positioning System ("GPS") optical, laser and wireless communications technology. We provide end-users and original equipment manufacturers with solutions for diverse applications including agriculture, engineering and construction, fleet and asset management, timing, automobile navigation and military. Our principal products, which utilize substantial amounts of proprietary software and firmware, are integrated systems for collecting, analyzing and utilizing position data in forms optimized for specific end-user applications.

#### RISK FACTORS

You should carefully consider the following risk factors and all other information contained in this prospectus before participating in this offering. Investing in our common stock involves a high degree of risk. If any of the following risks actually occur, our business, operating results and financial

condition could be materially harmed and you might lose all or part of your investment.

Fluctuations in Annual and Quarterly Performance.

Our operating results have fluctuated and can be expected to continue to fluctuate in the future on a quarterly and annual basis as a result of a number of factors, many of which are beyond our control. Results in any period could be affected by changes in market demand, competitive market conditions, market acceptance of new or existing products, fluctuations in foreign currency exchange rates, the cost and availability of components, our ability to manufacture and ship products, the mix of our customer base and sales channels, the mix of products sold, our ability to expand our sales and marketing organization effectively, our ability to attract and retain key technical and managerial employees and general global economic conditions. Due to the foregoing factors, our operating results in one or more future periods are expected to be subject to significant fluctuations. In the event such fluctuations result in our financial performance being below the expectations of public market analysts and investors, the price of our common stock could decline substantially.

Our revenues have historically tended to fluctuate on a quarterly basis due to the timing of shipments of products under contracts and the sale of licensing rights. A significant portion of our quarterly revenues occurs from orders received and immediately shipped to customers in the last few weeks and days of each quarter. If orders are not received, or if shipments were to be delayed a few days at the end of a quarter, our operating results and reported earnings per share for that quarter could be significantly impacted. Future revenues are difficult to predict, and projections are based primarily on historical models, which are not necessarily accurate representations of the future.

Despite the fluctuations in our quarterly sales patterns, our operating expenses are incurred on an approximately ratable basis. As a result, if expected sales are deferred for any reason, our business, operating results and financial condition could be materially adversely affected.

Our gross margin is affected by a number of factors, including product mix, product pricing, cost of components, foreign currency exchange rates and manufacturing costs. For example, since our Engineering & Construction and Geographic Information Systems (GIS) products generally have higher gross margins than our Component Technologies products, absent other factors, a shift in sales toward Engineering & Construction and GIS products would lead to a gross margin improvement. On the other hand, if market conditions in the highly

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competitive Engineering & Construction and GIS market segments forced us to lower unit prices, we would suffer a decline in gross margin unless we were able to timely offset the price reduction by a reduction in production costs or by sales of other products with higher gross margins. These types of events could have a material effect on our business, operating results and financial condition.

Risks Associated with Sole Suppliers and Limited Sources.

With the selection of Solectron Corporation in August 1999 as an exclusive manufacturing partner for many of our GPS products previously manufactured out of our Sunnyvale facilities, we are substantially dependent upon a sole supplier for the manufacture of our products. Under the agreement with Solectron, we

provide to Solectron a twelve-month product forecast and place purchase orders with Solectron sixty calendar days in advance of the scheduled delivery of products to our customers. Although purchase orders placed with Solectron are cancelable, the terms of the agreement would require us to purchase from Solectron all material inventory not returnable or usable by other Solectron customers. Accordingly, if we inaccurately forecast demand for our products, we may be unable to obtain adequate manufacturing capacity from Solectron to meet customers' delivery requirements or we may accumulate excess inventories. In addition, we rely on sole suppliers for a number of our critical ASICS. We have experienced shortages of such supplies in the past. Our reliance on sole or a limited group of suppliers involves several risks, including a potential inability to obtain an adequate supply of required components and reduced control over pricing. The disruption or termination of any of these sources could have a material adverse effect on our business, operating results and financial condition. Any inability to obtain adequate deliveries or any other circumstance that would require us to seek alternative sources of supply or to manufacture such components internally could significantly delay our ability to ship our products, which could damage relationships with current and prospective customers and could have a material adverse effect on our business, operating results and financial condition.

Risks Associated with Debt Covenants.

Two of the financial covenants in our Credit Agreement with ABN AMRO Bank, N.V. and certain other banks, dated as of July 14, 2000 as amended (the "Credit Agreement"), minimum fixed charge coverage and maximum leverage ratio, are extremely sensitive to changes in earnings before interest, taxes, depreciation and amortization ("EBITDA"). In turn, EBITDA is highly correlated to revenues and cost cutting. Due to uncertainties associated with the downturn in the worldwide economy, our future revenues by quarter are becoming increasingly more difficult to forecast and we have recently put in place various cost cutting measures. If revenues should decline at a faster pace than the rate of these cost cutting measures, on a quarter to quarter basis we may not be in compliance with the two above mentioned financial covenants. If we default on one or more covenants, we will have to obtain either negotiated waivers or amendments to the Credit Agreement. If we are unable to obtain such waivers or amendments, the banks would have the right to accelerate the payment of our outstanding obligations under the Credit Agreement, which would have a material adverse effect on our financial condition and viability as an operating company.

Risks of Managing Future Growth.

Any significant growth in our sales or any significant expansion in the scope of our operations could strain our current management, financial, manufacturing and other resources and may require us to implement and improve a variety of operating, financial and other systems, procedures and controls. While we plan to expand our sales, accounting, manufacturing, and other information systems to meet these challenges, there can be no assurance that these efforts will succeed, or that any existing or new systems over time, procedures or controls will be adequate to support our operations or that our systems, procedures and controls will be

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designed, implemented or improved in a cost effective and timely manner. Any failure to implement, improve and expand such systems, procedures and controls in a timely and efficient manner could have a material adverse effect on our business, operating results and financial condition.

Competition.

Our markets are highly competitive. Our overall competitive position depends on a number of factors including the price, quality and performance of our products, the level of customer service, the development of new technology and our ability to participate in emerging markets. Within each of our markets, we encounter direct competition from other GPS, optical and laser suppliers and competition may intensify from various larger domestic and international competitors and new market entrants, some of which may be our current customers. The competition in the future, may, in some cases, result in price reductions, reduced margins or loss of market share, any of which could materially and adversely affect our business, operating results and financial condition. We believe that our ability to compete successfully in the future against existing and additional competitors will depend largely on our ability to execute our strategy to provide systems and products with significantly differentiated features compared to currently available products. There can be no assurance that we will be able to implement this strategy successfully, or that any such products will be competitive with other technologies or products that may be developed by our competitors, many of whom have significantly greater financial, technical, manufacturing, marketing, sales and other resources than we do. There can be no assurance that we will be able to compete successfully against current or future competitors or that competitive pressures faced by us will not have a material adverse effect on our business, operating results and financial condition. We expect that both direct and indirect competition will increase in the future. Additional competition could adversely affect our business, operating results and financial condition through price reductions or loss of market share.

Risks Associated With International Operations and Sales.

Our customers are located throughout the world. In addition, we have significant offshore operations, including manufacturing facilities, sales personnel and customer support operations. Our offshore operations include facilities in Australia, Canada, China, France, Germany, Great Britain, Japan, Mexico, New Zealand, Sweden, Russia, Singapore and others. Our international presence exposes us to risks not faced by wholly-domestic companies. Specifically, we face the following risks, among others, unexpected changes in regulatory requirements; tariffs and other trade barriers; political, legal and economic instability in foreign markets, particularly in those markets in which we maintain manufacturing and research facilities; difficulties in staffing and management; language and cultural barriers; seasonal reductions in business activities in the summer months in Europe and some other countries; integration of foreign operations; longer payment cycles; greater difficulty in accounts receivable collection; currency fluctuations; and potentially adverse tax consequences. Although we implemented a program to attempt to manage foreign exchange risks through hedging and other strategies, there can be no assurance that this program will be successful and that currency exchange rate fluctuations will not have a material adverse effect on our results of operations. In addition, in certain foreign markets, there may be reluctance to purchase products based on GPS technology, given the control of GPS by the U.S. Government.

Volatility of Stock Price.

Our common stock has experienced and can be expected to experience substantial price volatility in response to actual or anticipated quarterly variations in results of operations, announcements of technological innovations or new products by us or our competitors, developments related to patents or other intellectual

property rights, developments in our relationship with customers, suppliers, or strategic partners and other events or factors. In addition, any shortfall or changes in revenue, gross margins, earnings, or other financial results from analysts' expectations could cause the price of our common stock to fluctuate significantly. Additionally, certain macro-economic factors such as changes in interest rates as well as market climate for the high-technology sector could also have an impact on the trading price of our stock.

Dependence on Proprietary Technology; Risk of Patent Infringement Claims.

Our future success and competitive position is dependent upon our proprietary technology, and we rely on patent, trade secret, trademark and copyright law to protect our intellectual property. There can be no assurance that the patents owned or licensed by us will not be invalidated, circumvented, challenged, or that the rights granted thereunder will provide competitive advantages to us or that any of our pending or future patent applications will be issued within the scope of the claims sought by us, if at all. Furthermore, there can be no assurance that others will not develop technologies that are similar or superior to our technology, duplicate our technology or design around the patents owned by us. In addition, effective copyright, patent and trade secret protection may be unavailable, limited or not applied for in certain foreign countries. There can be no assurance that the steps taken by us to protect our technology will prevent the misappropriation of such technology. The value of our products relies substantially on our technical innovation in fields in which there are many current patent filings. We recognize that as new patents are issued or are brought to our attention by the holders of such patents, it may be necessary for us to withdraw products from the market, take a license from such patent holders, or redesign our products. We do not believe any of our products currently infringe patents or other proprietary rights of third parties, but we cannot be certain they do not do so. In addition, the legal costs and engineering time required to safeguard intellectual property or to defend against litigation could become a significant expense of operations. Such events could have a material adverse effect on our revenues or profitability.

Dependence on New Products.

Our future revenue stream depends to a large degree on our ability to bring new products to market on a timely basis. We must continue to make significant investments in research and development in order to continue to develop new products, enhance existing products and achieve market acceptance of such products. However, there can be no assurance that development stage products will be successfully completed or, if developed, will achieve significant customer acceptance. If we were unable to successfully define, develop and introduce competitive new products, and enhance existing products, our future results of operations would be adversely affected. Development and manufacturing schedules for technology products are difficult to predict, and there can be no assurance that we will achieve timely initial customer shipments of new products. The timely availability of these products in volume and their acceptance by customers are important to our future success. In some of our markets where we currently have a market leadership position, a delay in new product introductions could have a significant impact on our results of operations. No assurance can be given that we will not incur problems in the future in innovating and introducing new products. In addition, some of our products are subject to governmental and similar certifications before they can be sold. For example, CE certification for radiated emissions is required for most GPS receiver and data communications products sold in the European Union. An inability to obtain such certifications in a timely manner could have an adverse effect on our operating results.

Strategic Alliances and External Investments.

We are continuously evaluating alliances and external investments in technologies related to our business, and have entered into many strategic alliances including making relatively small strategic equity investments in a number of GPS related technology companies. Acquisitions of companies, divisions of companies, or products and alliances and strategic investments entail numerous risks, including (i) the potential inability to successfully integrate acquired operations and products or to realize anticipated synergies, economies of scale, or other value; (ii) diversion of management's attention; (iii) loss of key employees of acquired operations; and (iv) inability to recover strategic investments in development stage entities. Any such problems could have a material adverse effect on our business, financial condition, and results of operations.

We also believe that in certain emerging markets our success will depend on our ability to form and maintain strategic alliances with established system providers and industry leaders. Our failure to form and maintain such alliances, or the preemption of such alliances by actions of other competitors or us will adversely affect our ability to penetrate emerging markets. No assurances can be given that we will not incur problems from current or future alliances, acquisitions, or investments. Furthermore, there can be no assurance that we will realize value from any such strategic alliances, acquisitions, or investments.

Dependence on Key Customers.

We currently enjoy strong relationships with key customers. An increasing amount of our revenue is generated from large original equipment manufacturers such as Siemens VDO Automotive, Nortel, Caterpillar, CNH Global (formerly Case Corporation), Bosch, and others. A reduction or loss of business with these customers could have a material adverse effect on our financial condition and results of operations. There can be no assurance that we will be able to continue to realize value from these relationships in the future.

Dependence on Key Markets and Successful Identification of New Markets.

Our current products serve many applications in Engineering & Construction, Agriculture, Fleet & Asset Management, Component Technologies, and Portfolio Technologies market segments. No assurances can be given that these market segments will continue to generate significant or consistent demand for our products. Existing market segments could be significantly diminished by new technologies or products that replace or render obsolete our technologies and products. We are dependent on successfully identifying new markets for our products. There can be no assurance that we will be able to successfully identify new high-growth markets in the future. Moreover, there can be no assurance that new markets will develop for our or our customers' products, or that our technology or pricing will enable such markets to develop.

Dependence on Retaining and Attracting Highly Skilled Development and Managerial Personnel.

Our ability to maintain our competitive technological position will depend, in a large part, on our ability to attract, motivate, and retain highly qualified development and managerial personnel. Competition for qualified employees in our industry and location is intense, and there can be no assurance that we will be able to attract, motivate and retain enough qualified employees necessary for the future continued development of our business and products.

Potential Adverse Impact of Governmental and Other Similar Certifications.

We market certain products that are subject to governmental and similar certifications before they can be sold. For example, FAA certification is required for all aviation products. Also, our products that use integrated radio communication technology require an end-user to obtain licensing from the Federal Communications Commission ("FCC") for frequency-band usage. During the fourth quarter of 1998, the FCC temporarily suspended the issuance of licenses for certain of our real-time kinematic products because of interference with certain other users of similar radio frequencies. An inability or delay in obtaining such certifications or delays of the FCC could have an adverse effect on our operating results.

Dependence on Radio Frequency Spectrum.

Our GPS technology is dependent on the use of the Standard Positioning Service ("SPS") provided by the U.S. Government's Global Positioning System ("GPS"). The GPS SPS operates in radio frequency bands that are globally allocated for radio navigation satellite services. International allocations of radio frequency are made by the International Telecommunications Union ("ITU"), a specialized technical agency of the United Nations. These allocations are further governed by radio regulations that have treaty status and which may be subject to modification every two-three years by the World Radiocommunication Conference. Any ITU reallocation of radio frequency bands, including frequency band segmentation or sharing of spectrum, may materially and adversely affect the utility and reliability of our products, which would, in turn, cause a material adverse effect on our operating results. Many of our products use other radiofrequency bands, together with the GPS signal, to provide enhanced GPS capabilities, such as real-time kinematic precision. The continuing availability of these non-GPS radiofrequencies is essential to provide enhanced GPS products to our precision survey markets. Any regulatory changes in spectrum allocation or in allowable operating conditions may materially and adversely affect the utility and reliability of our products, which would, in turn, cause a material adverse effect on our operating results. In addition, unwanted emissions from mobile satellite services and other equipment operating in adjacent frequency bands or inband from licensed and unlicensed devices may materially and adversely affect the utility and reliability of our products, which could result in a material adverse effect on our operating results. The FCC continually receives proposals for novel technologies and services, such as ultra-wideband technologies, which may seek to operate in, or across, the radio frequency bands currently used by the GPS SPS and other public safety services. Adverse decisions by the FCC that result in harmful interference to the delivery of the GPS SPS and other radio frequency spectrum also used in our products may materially and adversely affect the utility and reliability of our products, which could result in a material adverse effect on our operating results.

Potential Adverse Impact of Radiofrequency Congestion.

We have certain products that use integrated radio communication technology that requires access to available radio frequencies allocated by the FCC. In addition, access to these frequencies by state agencies is under management by state radio communications coordinators. Some bands are experiencing congestion that excludes their availability for access by state agencies in some states, including the state of California. An inability to obtain access to these radio frequencies could have an adverse effect on our operating results.

Reliance on GPS Satellite Network.

The GPS satellites and their ground support systems are complex electronic systems subject to electronic and mechanical failures and possible sabotage. The satellites were originally designed to have lives

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of 7.5 years and are subject to damage by the hostile space environment in which they operate. However, of the current deployment of 27 satellites in place, some have already been in place for 12 years and have an average age of six years. To repair damaged or malfunctioning satellites is currently not economically feasible. If a significant number of satellites were to become inoperable, there could be a substantial delay before they are replaced with new satellites. A reduction in the number of operating satellites would impair the current utility of the GPS system and the growth of current and additional market opportunities. In addition, there can be no assurance that the U.S. Government will remain committed to the operation and maintenance of GPS satellites over a long period, or that the policies of the U.S. Government for the use of GPS without charge will remain unchanged. However, a 1996 Presidential Decision Directive marks the first time in the evolution of GPS that access for civilian use free of direct user fees is specifically recognized and supported by Presidential policy. In Presidential policy has been complemented by corresponding addition, legislation, signed into law. Because of ever-increasing commercial applications of GPS, other U.S. Government agencies may become involved in the administration or the regulation of the use of GPS signals. Any of the foregoing factors could affect the willingness of buyers of our products to select GPS-based systems instead of products based on competing technologies. Any resulting change in market demand for GPS products could have a material adverse effect on our financial results. For example, European governments have expressed interest in building an independent satellite navigation system, known as Galileo. Depending on the as yet undetermined design and operation of this system, there may be interference to the delivery of the GPS SPS and may materially and adversely affect the utility and reliability of our products, which could result in a material adverse effect on our operating results.

Reliance on Continuous Power Supply.

California recently experienced an energy crisis that threatened to disrupt our operations and resulted in increased expenses for our California facilities. In the event of an acute power shortage, that is, when power reserves for the State of California fall below certain critical levels, California has on some occasions implemented, and may in the future continue to implement, rolling blackouts throughout the state. We currently do not have adequate backup generators or alternate sources of power in the event of a blackout, and our current insurance does not provide coverage for any damages we or our customers may suffer as a result of any interruption in our power supply. If blackouts interrupt our power supply or Solectron's power supply, we would be temporarily unable to continue operations at our California facilities. Any such interruption in our ability to continue operations at our facilities or Solectron's ability to manufacture product at its facilities could damage our reputation, harm our ability to retain existing customers and to obtain new customers, and could result in lost revenue, any of which could substantially harm our business and results of operations.

## USE OF PROCEEDS

The selling shareholders will receive all of the proceeds from the shares to be sold in this offering.

#### SELLING SHAREHOLDERS

We originally sold the shares of common stock being registered in this Registration Statement, and we originally issued warrants exercisable for shares of common stock being registered in this Registration Statement, in private placement transactions in December 2001 and January 2002. Selling shareholders

may offer and sell the common stock is suable upon exercise of their warrants pursuant to this prospectus.

The following table contains information as of January 16, 2002, with respect to the selling shareholders and the number of shares of common stock beneficially owned by each selling shareholder that may be offered using this prospectus.

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	Number of Shares Beneficially Owned Prior to the Offering		Number of Shares That Ma Be Sold in th	
Name		Percentage(2)	Offering(3)	
AIG SoundShore Holdings Ltd	148,720	*	148,720	
AIG SoundShore Opportunity Holding Fund  AIG SoundShore Private Investors Holding Fund	98,280	*	98,280	
Ltd	60,000	*	60,000	
AIG SoundShore Strategic Holding Fund Ltd	69,000	*	69,000	
Castle Creek Technology Partners LLC	480,003	1.7%	480,003	
Cleveland Overseas Ltd	100,001	*	100,001	
Cranshire Capital, L.P	304,002	1.1%	304,002	
Euram Cap Strat. "A" Fund Limited	96,000	*	96,000	
First Investors Holding Co., Inc	640,001	2.3%	640,001	
Pine Ridge Financial Inc	964,602	3.4%	960,002	
Steelhead Investments Inc	160,001	*	160,001	
ZLP Master Technology Fund, LTD	560,003	*	560,003	

- \* Indicates less than 1%.
- (1) Includes shares of common stock issuable upon the exercise of that particular holder's warrants.
- (2) Calculated based on Rule 13d-3(d)(1)(i) of the Exchange Act using 28,144,912 shares of common stock outstanding as of January 16, 2002. In calculating this amount for each holder, we treated as outstanding the number of shares of common stock issuable upon exercise of all of that particular holder's warrants. However, we did not assume the exercise of any other holder's warrants.
- (3) Assumes full exercise of each of the holder's warrants.
- (4) Assumes the sale of all shares that may be sold in the offering.

We prepared this table based on the information supplied to us by the selling shareholders named in the table.

The selling shareholders listed in the above table may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act, some or all of their shares or warrants since the date on which the information in the above table is presented. Information about the selling shareholders may change over time.

Because the selling shareholders may offer all or some of their common stock from time to time, we cannot estimate the amount of common stock that will be held by the selling shareholders upon the termination of any particular

offering. See "Plan of Distribution."

#### PLAN OF DISTRIBUTION

We will not receive any of the proceeds of the sale of the common stock offered by this prospectus. The selling shareholders and any of their pledgees, assignees and successors-in-interest named in the Registration Statement on Form S-3 may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling shareholders may use any one or more of the following methods when selling shares:

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- o ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- o block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- o purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- o an exchange distribution in accordance with the rules of the applicable exchange;
- o privately negotiated transactions;
- o short sales;
- o broker-dealers may agree with the selling shareholders to sell a specified number of such shares at a stipulated price per share;
- o a combination of any such methods of sale; and
- o any other method permitted pursuant to applicable law.

The selling shareholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling shareholders may also engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades. The selling shareholders may pledge their shares to their brokers under the margin provisions of customer agreements. If a selling shareholder defaults on a margin loan, the broker may, from time to time, offer and sell the pledged shares.

Broker-dealers engaged by the selling shareholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling shareholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling shareholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or

discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the selling shareholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act, and the selling shareholders have agreed to indemnify us against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

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#### EXPERTS

The consolidated financial statements of Trimble Navigation Limited incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2000, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon incorporated therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

The combined financial statements of Spectra Precision incorporated by reference in our Current Report on Form 8-K/A as filed on September 22, 2000, have been audited by Arthur Andersen LLP, independent auditors, as set forth in their report thereon incorporated therein and incorporated herein by reference. Such combined financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

#### VALIDITY OF COMMON STOCK

The validity of the issuance of our common stock offered by this prospectus will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California.

## INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this Prospectus the information we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the sale of all of the shares of common stock that are part of this offering. The documents we are incorporating by reference are as follows:

- o Our Current Report on Form 8-K/A as filed with the SEC on September 22, 2000;
- O Our Annual Report on Form 10-K for the fiscal year ended December 29, 2000, as filed with the SEC on March 29, 2001;
- o Our Quarterly Report on Form 10-Q for the quarter ended March 30, 2001, as filed with the SEC on May 14, 2001;
- o Our Quarterly Report on Form 10-Q for the quarter ended June 29, 2001, as filed with the SEC on August 13, 2001;

- O Our Quarterly Report on Form 10-Q for the quarter ended September 28, 2001, as filed with the SEC on November 13, 2001;
- o Our Current Report on Form 8-K as filed with the SEC on December 24, 2001;
- o Our Current Report on Form 8-K as filed with the SEC on January 16, 2002;

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- o The description of our common stock contained in our Registration Statement on Form 8-A filed on June 15, 1990, and any amendment or report filed for the purpose of updating such description; and
- o The description of certain dividend rights on our common stock contained in our Registration Statement on Form 8-A filed on February 18, 1999.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the SEC and incorporated by reference) modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded. You may request a copy of these filings at no cost (other than exhibits unless such exhibits are specifically incorporated by reference) by writing or telephoning our investor relations department at the following address and telephone number: Trimble Navigation Limited. 645 North Mary Avenue Sunnyvale, California 94088, (408) 481-8000.

#### AVAILABLE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance therewith, 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 facilities at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov.

Shares of our common stock are traded as "National Market Securities" on the Nasdaq National Market. Documents we file can be inspected at the offices of the National Association of Securities Dealers, Inc., Reports Section, 1735 K Street, N.W., Washington, D.C. 20006.

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#### PART II

#### INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the expenses, other than any underwriting discount and commissions, in connection with the issuance and distribution of the securities being registered. All amounts indicated are estimates (other than the registration fee):

Registration fee	\$5 <b>,</b> 351
Accounting fees and expenses	\$11 <b>,</b> 500
Legal fees and expenses of the registrant	\$25,000
Miscellaneous	\$5 <b>,</b> 000
Total	\$46,851

#### Item 15. Indemnification of Directors and Officers

Section 317 of the California Corporations Code authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit indemnification, including reimbursement of expenses incurred, under certain circumstances for liabilities arising under the Securities Act. Our restated articles of incorporation, as amended, and amended bylaws provide for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the California Corporations Code. In addition, we have entered into indemnification agreements with each of our directors and officers.

#### Item 16. Exhibits

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Exhibit Title
3.1	Restated Articles of Incorporation of Trimble Navigation Limited, filed June 25, 1986. (1)
3.2	Certificate of Amendment of Articles of Incorporation of Trimble Navigation Limited, filed October 6, 1988. (1)
3.3	Certificate of Amendment of Articles of Incorporation of Trimble Navigation Limited, filed July 18, 1990. (1)
3.4	Certificate of Determination of Trimble Navigation Limited, filed February 19, 1999. (1)
3.8	Amended and Restated Bylaws of Trimble Navigation Limited. (2)
4.1	First Amended and Restated Stock and Warrant Purchase Agreement, dated January 14, 2002. (3)
4.2	Form of Warrant, dated January 14, 2002. (3)
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
23.1	Consent of Ernst & Young LLP, independent accountants.
23.2	Consent of Arthur Andersen LLP, independent accountants.
23.3	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).

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Exhibit Numbe	er	Exhibit Title	
24.1	Power of Attorney	(see page II-4 of thi	s Registration Statement).

<sup>(1)</sup> Incorporated by reference to identically numbered exhibits filed in response to Item 14(a), "Exhibits" of the registrant's Annual Report on Form 10-K for the fiscal year ended January 1, 1999, as filed with the SEC

- on March 29, 1999.
- (2) Incorporated by reference to identically numbered exhibits filed in response to Item 14(a), "Exhibits" of the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the SEC on March 27, 2000.
- (3) Incorporated by reference to corresponding exhibits filed in response to Item 7(c), "Exhibits" of the registrant's Current Report on Form 8-K as filed with the SEC on January 16, 2002.

#### Item 17. Undertakings

- 1. The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933 (the "Act");
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in clauses (i) and (ii) above shall not apply if the information required to be included in a post-effective amendment by these clauses is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") that are incorporated by reference in this registration statement.

- (2) That, for the purpose of determining any liability under the Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

- 2. The undersigned registrant hereby undertakes, that, for purposes of determining any liability under the Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- 3. Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, 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. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
  - 4. The undersigned registrant hereby undertakes that:
- (1) For purposes of determining any liability under the Act, 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) or (4) or 497(h) under the Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sunnyvale, State of California, on January 17, 2002.

## TRIMBLE NAVIGATION LIMITED

By: /s/ Steven W. Berglund

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Steven W. Berglund

President and Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Steven W. Berglund and Mary Ellen Genovese, jointly and severally, as his true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents the full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, on January 17, 2002, this Registration Statement has been signed by the following persons in the capacities indicated:

Name	Title	Date
/s/ Steven W. Berglund		
Steven W. Berglund		
/s/ Mary Ellen Genovese	Chief Financial Officer	January 17, 2002
Mary Ellen Genovese		
/s/ Anup V. Singh	Corporate Controller	January 17, 2002
Anup V. Singh		
/s/ Robert S. Cooper	Director	January 17, 2002
Robert S. Cooper		
/s/ John B. Goodrich	Director	January 17, 2002
John B. Goodrich		
/s/ William Hart	Director	January 15, 2002
William Hart		
/s/ Ulf J. Johansson	Director	January 17, 2002
Ulf J. Johansson		
/s/ Bradford W. Parkinson	Director	January 15, 2002
Bradford W. Parkinson		

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5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
23.1	Consent of Ernst & Young LLP, independent accountants.
23.2	Consent of Arthur Andersen LLP, independent accountants.
23.3	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Power of Attorney (see page $\text{II-4}$ of this Registration Statement).

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- (1) Incorporated by reference to identically numbered exhibits filed in response to Item 14(a), "Exhibits" of the registrant's Annual Report on Form 10-K for the fiscal year ended January 1, 1999, as filed with the SEC on March 29, 1999.
- (2) Incorporated by reference to identically numbered exhibits filed in response to Item 14(a), "Exhibits" of the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the SEC on March 27, 2000.
- (3) Incorporated by reference to corresponding exhibits filed in response to Item 7(c), "Exhibits" of the registrant's Current Report on Form 8-K as filed with the SEC on January 16, 2002.

#### EXHIBIT 5.1

# LEGAL OPINION OF WILSON SONSINI GOODRICH & ROSATI, PROFESSIONAL CORPORATION

[WILSON SONSINI GOODRICH & ROSATI LETTERHEAD]

January 17, 2002

Trimble Navigation Limited 645 North Mary Ave. Sunnyvale, California 94088

RE: REGISTRATION STATEMENT ON FORM S-3

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-3 to be filed by you with the Securities and Exchange Commission on or about January 17, 2002 (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended, of up to 3,063,341 shares of your common stock, no par value (the "Shares") and 612,672 shares of your common stock reserved for issuance upon the exercise of warrants ("Warrant Shares"). As legal

counsel to Trimble Navigation Limited in connection with this transaction, we have examined the proceedings taken, and are familiar with the proceedings proposed to be taken, by you in connection with the sale and issuance of the Shares and Warrant Shares.

It is our opinion that the Shares have been duly authorized and that, upon completion of the proceedings being taken or contemplated by us, as your counsel, to be taken prior to the issuance of the Shares, including the proceedings being taken, if any, in order to permit such transaction to be carried out in accordance with applicable state securities laws, the Shares, when issued and sold in the manner described in the Registration Statement, will be legally and validly issued, fully paid and nonassessable.

It is our opinion that the Warrant Shares, when issued by you upon the exercise of warrants in accordance with the terms therein, and upon completion of the proceedings being taken or contemplated by us, as your counsel, to be taken prior to the issuance of the Warrant Shares, including the proceedings being taken, if any, in order to permit such transaction to be carried out in accordance with applicable state securities laws, the Warrant Shares, when issued and sold in the manner described in the Registration Statement, will be legally and validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement, including the prospectus constituting a part thereof, and any amendment thereto. Very truly yours,

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

/s/ Wilson Sonsini Goodrich & Rosati

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT ACCOUNTANTS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Trimble Navigation for the registration of 3,676,013 shares of its common stock and to the incorporation by reference therein of our report dated January 26, 2001, with respect to the consolidated financial statements and schedule of Trimble Navigation Limited included in its Annual Report (Form 10-K) for the year ended December 31, 2000, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Palo Alto, California January 16, 2002

EXHIBIT 23.2

CONSENT OF ARTHUR ANDERSEN LLP, INDEPENDENT ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this registration statement of our report dated July 5, 2000 included in Trimble Navigation Limited's Form 8-K/A filed September 22, 2000 and to all references to our Firm included in this registration statement.

/s/ Arthur Andersen LLP

Boston, Massachusetts January 16, 2002