As filed with the Securities and Exchange Commission on November 4, 2002

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

REGISTRATION STATEMENT
ON
FORM S-3
UNDER THE SECURITIES ACT OF 1933

ODETICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**95-2588496**
(State or other jurisdiction of incorporation)	(I.R.S. Employer Identification Number)

1515 South Manchester Avenue
Anaheim, California 92802
(714) 774-5000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

GREGORY A. MINER
Chief Executive Officer and Chief Financial Officer
Odetics, Inc.
1515 South Manchester Avenue
Anaheim, California 92802
(714) 774-5000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
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38 Technology Drive
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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. ☒

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

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

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

CALCULATION OF REGISTRATION FEE

Title of Shares to be Registered	Amount to be Registered	Proposed Maximum Offering Price per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Class A common stock, $0.10 par value per share (including associated preferred stock purchase rights)	213,316 shares(2)	$0.65	$138,656	$12.76

(1) Estimate based upon the average of the high and low sales prices of the Registrant's Class A common stock on October 31, 2002, as reported by the Nasdaq SmallCap Market, pursuant to Rule 457(c) promulgated under the Securities Act of 1933, as amended.

(2) Pursuant to Rule 416, this registration statement also covers any additional shares of Class A common stock which become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction.

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.

PROSPECTUS

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 it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

213,316 Shares

ODETICS, INC.

Class A Common Stock

This prospectus relates to the offering from time to time of a total of 213,316 shares of the Class A common stock of Odetics, Inc. by the selling stockholders listed on page 17. All of these shares were issued to the selling stockholders in cancellation of outstanding indebtedness owed to the selling stockholders by us or our subsidiaries. The prices at which the selling stockholders may sell their shares will be determined by the prevailing market price for their shares or in negotiated transactions. We will not receive any of the proceeds from the sale of these shares.

We have two classes of common stock outstanding—the Class A common stock and the Class B common stock. The rights, preferences and privileges of each class of common stock are identical in all respects except for voting rights. As of the date of this prospectus, the holders of the Class A common stock are entitled to elect 25% of the Board of Directors rounded up to the nearest whole number, or two directors, and the holders of the Class A common stock and the Class B common stock, voting together as a single class, are entitled to elect the balance of the Board, or six directors. On all other matters to be addressed by a stockholder vote, the holders of Class A common stock have one-tenth of one vote per share held and the holders of Class B common stock have one vote per share held.

Our Class A common stock and our Class B common stock are quoted on the Nasdaq SmallCap Market under the symbol "ODETA" and "ODETB," respectively. On October 31, 2002, the last reported sale price for the Class A common stock was $0.68 per share and on October 29, 2002, the last reported sale price for the Class B common stock was $0.62 per share.

You should carefully consider the risk factors beginning on page 3 of this prospectus before purchasing any of the Class A common stock offered by this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is November , 2002.

ODETICS

Odetics, Inc. provides products, systems and services that control and manage the use of public roadways, secure access to public and private facilities, and secure the delivery of digital communications. Our company was founded in 1969 to supply digital recorders for use in the United States space program. We pioneered new designs and standards for digital magnetic tape recorders offering high reliability and enhanced performance in the adverse environment attendant to space flight. In the 1970s, we broadened our information automation product line to include time-lapse videocassette recorders for commercial security and surveillance applications, and entered the business of manufacturing telecom network synchronization products. Through our MAXxess Systems, Inc. (previously known as Gyyr Incorporated) subsidiary, we became a leading supplier of time-lapse videotape cassette recorders, and we pioneered new products incorporating digital video technologies and related CCTV products used in security and surveillance systems. In April 2001, we sold Gyyr's Vortex Dome and Quarterback Controller product lines. Then in

September 2001, we sold the assets of our CCTV product line, and changed the name of our Gyyr subsidiary to MAXxess Systems, Inc. to continue to pursue the security market with electronic access control products and systems.

Beginning in the late 1970s, we developed and manufactured telecom synchronization products in our Communications division. We incorporated our Communications division in fiscal 1999 as our wholly-owned subsidiary, Zyfer, Inc., as part of our business expansion to develop products focused on the security aspects of data traffic over ground and satellite links, and network communications.

Leveraging our expertise in video image processing, we entered into the intelligent transportation system, or ITS, business with the introduction of a video-based vehicle detection system in 1993. In June 1997, we acquired certain assets comprising the Transportation Systems business from Rockwell International, creating our ITS division, which expanded our offerings to include advanced traffic management systems and advanced traveler information systems. We incorporated our ITS division in 1998 as Odetics ITS, Inc. In October 1998, we broadened our systems offerings by acquiring Meyer, Mohaddes Associates, Inc. In January 2000, we reincorporated Odetics ITS in Delaware and changed its name to Iteris, Inc. Odetics currently owns 78.2% of the outstanding common stock of Iteris, or 62.7% as calculated for the preferred stock conversion equivalent. Meyer, Mohaddes Associates, Inc. currently operates as a wholly-owned subsidiary of Iteris, Inc.

In the early 1980s, we developed the technical expertise to apply automation to new commercial applications and established our Odetics Broadcast division. We incorporated our Odetics Broadcast division in 1999 as Broadcast, Inc. Broadcast is a supplier of content management and delivery solutions for the television, cable and satellite industries. The success of our videotape libraries led us to pursue new applications for information automation technologies. In 1991, we introduced an automated tape handling subsystem for integration into tape libraries designed for midrange computers and client/server networks. In January 1993, we formed a separate subsidiary, ATL Products, Inc., to pursue the market for automated tape libraries. In March 1997, ATL completed an initial public offering of 1,650,000 shares of its Class A common stock. We distributed our remaining 82.9% interest in ATL to our stockholders in a tax-free distribution in October 1997.

Odetics products address the security and data management needs of the transportation, defense, facility security, and broadcast industries. Odetics is a market leader for video-based sensors used for surface transportation, a developer of integrated systems for facility security and trace detection of dangerous chemicals and explosives, and a provider of automation systems to the broadcast industry. Odetics is also a leading provider of equipment built around specific government mandates for secured communications.

Our principal executive offices are located at 1515 South Manchester Avenue, Anaheim, California 92802, and our telephone number is (714) 774-5000.

RISK FACTORS

Our business is subject to a number of risks, some of which are discussed below. Other risks are presented elsewhere in this prospectus and in the information incorporated by reference into the prospectus. You should consider the following risks carefully in addition to the other information contained in this prospectus (including the information incorporated by reference) before purchasing the shares of our common stock. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. If any of these risks actually occur, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose all or part of your investment.

Before deciding to buy, hold or sell our common stock, you should carefully consider the risks described below, in addition to the other information contained in this prospectus and in our other filings with the SEC, including our Annual Report on Form 10-K for the year ended March 31, 2002, as well as our subsequent reports on Form 10-Q and 8-K.

We Have Experienced Substantial Losses and Expect to Continue Experiencing Losses for the Foreseeable Future. We experienced operating losses of $0.3 million in the three months ended June 30, 2002, $10.8 million in the year ended March 31, 2002, $37.9 million in the year ended March 31, 2001 and $32.9 million in the year ended March 31, 2000. In the quarter ended September 30, 2001, we downsized our business in connection with our sale of the Gyyr CCTV products line, the discontinuation of the business of our Mariner Networks subsidiary and the reorganization of our European operations. We cannot assure you that our efforts to downsize our operations will improve our financial performance, or that we will be able to achieve profitability on a quarterly or annual basis in the future. Most of our expenses are fixed in advance, and we generally are unable to reduce our expenses significantly in the short-term to compensate for any unexpected delay or decrease in anticipated revenues. As a result, we may continue to experience losses, which would make it difficult to fund our operations and achieve our business plan, and could cause the market price of our common stock to decline.

We Will Need to Raise Additional Capital in the Future, But We May Not Be Able to Secure Adequate Funds on Terms Acceptable to Us, or at All. We have generated significant net losses in recent periods, and have experienced negative cash flows from operations of $1.1 million in the three months ended June 30, 2002, $18.2 million in the year ended March 31, 2002 and $20.1 million in the year ended March 31, 2001. Although we completed the sale of our Anaheim, California property in May 2002, the majority of the proceeds of such sale were used to repay outstanding short-term indebtedness. We anticipate that we will need to raise additional capital in the future. Our Iteris subsidiary currently maintains a line of credit with a maximum availability of $5.0 million, which expires in August 2004. Substantially all of the assets of Iteris have been pledged to the lender to secure the outstanding indebtedness under this facility (although there were no amounts outstanding under the line of credit at November 1, 2002). We also incurred cash obligations in the amount of $3.0 million payable over the next seven months related to the discontinuation of Mariner Networks and the reorganization of our European operations. We plan to raise additional capital in the near future, either through bank borrowings, other debt or equity financings, or the divestiture of business units or select assets. We cannot assure you that any additional capital will be available on a timely basis, on acceptable terms, or at all. These conditions, together with our recurring losses and cash requirements, raise substantial doubt about our ability to continue as a going concern.

Our capital requirements will depend on many factors, including:

- our ability to control costs;

- market acceptance of our products and the overall level of sales of our products;

- our ability to generate operating income;
- increased research and development funding, and required investments in our business units;
- increased sales and marketing expenses;
- technological advancements and our competitors' response to our products;
- capital improvements to new and existing facilities;
- potential acquisitions of businesses and product lines;
- our relationships with customers and suppliers; and
- general economic conditions, including the effects of the current economic slowdown and international conflicts.

If our capital requirements are materially different from those currently planned, we may need additional capital sooner than anticipated. If additional funds are raised through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders will be reduced and such securities may have rights, preferences and privileges senior to our common stock. Additional financing may not be available on favorable terms or at all. If adequate funds are not available or are not available on acceptable terms, we may be unable to continue our operations as planned, develop or enhance our products, expand our sales and marketing programs, take advantage of future opportunities or respond to competitive pressures.

The Trading Price of Our Common Stock Is Highly Volatile And You May Not Be Able to Resell Your Shares of Stock At or Above the Price You Paid for Them. The trading price of our common stock has been subject to wide fluctuations in the past. Since January 2000, our common stock has traded at prices as low as $0.49 per share and as high as $29.44 per share. In April 2002, because we failed to meet the minimum stockholder's equity requirement for continued listing on the Nasdaq National Market, both our Class A common stock and Class B common stock were delisted from the Nasdaq National Market and subsequently approved for listing on the Nasdaq SmallCap Market. If our stock price continues to decline or declines below $1.00 per share for a period of time, our common stock could be subject to delisting from the Nasdaq SmallCap Market and there may not be a market for our stock. We may not be able to increase or sustain the current market price of our common stock in the future. As such, you may not be able to resell your shares of common stock at or above the price you paid for them. The market price of our common stock could continue to fluctuate in the future in response to various factors, including, but not limited to:

- quarterly variations in operating results;
- our ability to control costs and improve cash flow;
- shortages announced by suppliers;
- announcements of technological innovations or new products by our competitors, customers or us;
- acquisitions or businesses, products or technologies;
- changes in pending litigation or new litigation;
- changes in investor perceptions;
- our ability to spin-off any business unit;
- applications or product enhancements by us or by our competitors; and
- changes in earnings estimates or investment recommendations by securities analysts.

The stock market in general has recently experienced volatility, which has particularly affected the market prices of equity securities of many high technology companies. This volatility has often been unrelated to the operating performance of these companies. These broad market fluctuations may adversely affect the market price of our common stock. In the past, companies that have experienced volatility in the market price of their securities have been the subject of securities class action litigation. If we were to become the subject of a class action lawsuit, it could result in substantial losses and divert management's attention and resources from other matters.

We Depend on Government Contracts and Subcontracts, and Because Many of our Government Contracts are Fixed Price Contracts, Higher Than Anticipated Costs Will Reduce Our Profits. A significant portion of the sales by Iteris and a portion of the sales by Zyfer were derived from contracts with governmental agencies, either as a general contractor, subcontractor or supplier. Government contracts represented approximately 24%, 26% and 38% of our total net sales and contract revenues for the years ended March 31, 2000, 2001 and 2002, respectively. We anticipate that revenue from government contracts will continue to increase in the near future. Government business is, in general, subject to special risks and challenges, including:

- long purchase cycles or approval processes;
- competitive bidding and qualification requirements;
- performance bond requirements;
- changes in government policies and political agendas;
- delays in funding, budgetary constraints and cut-backs; and
- milestone requirements and liquidated damage provisions for failure to meet contract milestones.

In addition, a large number of our government contracts are fixed price contracts. As a result, we may not be able to recover for any cost overruns. These fixed price contracts require us to estimate the total project cost based on preliminary projections of the project's requirements. The financial viability of any given project depends in large part on our ability to estimate these costs accurately and complete the project on a timely basis. In the event our costs on these projects exceed the fixed contractual amount, we will be required to bear the excess costs. These additional costs adversely affect our financial condition and results of operations. Moreover, certain of our government contracts are subject to termination or renegotiation at the convenience of the government, which could result in a large decline in our net sales in any given quarter. Our inability to address any of the foregoing concerns or the loss or renegotiation of any material government contract could seriously harm our business, financial condition and results of operations.

The Recent Worldwide Economic Slowdown and Related Uncertainties Could Adversely Impact the Demand for Our Products. Concerns about inflation, decreased consumer confidence, reduced corporate profits and capital spending, and recent international conflicts and terrorist and military actions have resulted in a downturn in worldwide economic conditions, particularly in the United States. As a result of these unfavorable economic conditions, we have experienced a slowdown in customer orders, cancellations and rescheduling of backlog and higher overhead costs. In addition, recent political and social turmoil related to international conflicts and terrorist acts can be expected to put further pressure on economic conditions in the U.S. and worldwide. These political, social and economic conditions make it extremely difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. If such conditions continue or worsen, our business, financial condition and results of operations will likely be materially and adversely affected.

Our Quarterly Operating Results Fluctuate as a Result of Many Factors. Therefore, We May Fail to Meet or Exceed the Expectations of Securities Analysts and Investors, Which Could Cause Our Stock Price to Decline. Our quarterly revenues and operating results have fluctuated and are likely to continue to vary from quarter to quarter due to a number of factors, many of which are not within our control. Factors that could affect our revenues include, among others, the following:

- our ability to raise additional capital;
- our significant investment in research and development for our subsidiaries and business units;
- our ability to control costs;
- international conflicts and acts of terrorism;
- our ability to develop, introduce, market and gain market acceptance of new products applications and product enhancements in a timely manner;
- the size, timing, rescheduling or cancellation of significant customer orders;
- the introduction of new products by competitors;
- the availability of components used in the manufacture of our products;
- changes in our pricing policies and the pricing policies by our suppliers and competitors, pricing concessions on volume sales, as well as increased price competition in general;
- the long lead times associated with government contracts or required by vehicle manufacturers;
- our success in expanding and implementing our sales and marketing programs;
- the effects of technological changes in our target markets;
- our relatively small level of backlog at any given time;
- the mix of sales among our business units;
- deferrals of customer orders in anticipation of new products, applications or product enhancements;
- the risks inherent in our acquisitions of technologies and businesses;
- risks and uncertainties associated with our international business;

- currency fluctuations and our ability to get currency out of certain foreign countries; and
- general economic and political conditions.

In addition, our sales in any quarter may consist of a relatively small number of large customer orders. As a result, the timing of a small number of orders may impact our quarter-to-quarter results. The loss of or a substantial reduction in orders from any significant customer could seriously harm our business, financial condition and results of operations.

Due to all of the factors listed above and other risks discussed in this prospectus, our future operating results could be below the expectations of securities analysts or investors. If that happens, the trading price of our common stock could decline. As a result of these quarterly variations, you should not rely on quarter-to-quarter comparisons of our operating results as an indication of our future performance.

Our Operating Strategy for Developing Companies is Expensive, Requires the Commitment of Significant Time and Resources, and May Not Be Successful. Our business strategy historically has required us to make significant investments in our business units. These investments are expensive and require the commitment of significant time and resources. We expect to continue to invest in the development of

certain of our business units with the goal of achieving profitability in each of our business units, and to a lesser extent, to monetize those business units for the benefit of our stockholders through an initial public offering, spin-off or sale to a strategic buyer. We may not recognize the benefits of this investment for a significant period of time, if at all. Our ability to achieve profitability in any business unit, to complete any private or public offerings of securities by any of our business units, and/or to spin-off our interest in the business unit to our stockholders will depend upon many factors, including:

- the overall performance and results of operations of the particular business unit;
- the potential market for our business unit;
- our ability to assemble and retain a qualified management team for the business unit;
- our financial position and cash requirements;
- the business unit's customer base and product line;
- the current tax treatment of spin-off and sale transactions, and our ability to obtain favorable determination letters from the Internal Revenue Service; and
- general economic and market conditions, including the receptiveness of the stock markets to initial public offerings and private placements.

We may not be able to achieve profitability in our business units, to complete a successful private or public offering or to spin-off any of our business units in the near future, or at all. During fiscal 2001, we attempted to complete the initial public offering of Iteris, but withdrew the offering due to adverse market conditions. Even if we are able to achieve profitability and the market is receptive to public offerings, we may decide not to complete any further offerings, not to spin-off a particular business unit, or to delay a spin-off until a later date.

If We Do Not Keep Pace with Rapid Technological Changes and Evolving Industry Standards, We Will Not be Able to Remain Competitive and There Will Be No Demand for Our Products. Our target markets are in general characterized by the following factors:

- rapid technological advances;
- downward price pressure in the marketplace as technologies mature;
- changes in customer requirements;
- frequent new product introductions and enhancements; and
- evolving industry standards and changes in the regulatory environment.

Our future success will depend upon our ability to anticipate and adapt to changes in technology and industry standards, and to effectively develop, introduce, market and gain broad acceptance of new products and product enhancements incorporating the latest technological advancements.

We believe that we must continue to make substantial investments to support ongoing research and development in order to remain competitive. We need to continue to develop and introduce new products that incorporate the latest technological advancements in hardware, storage media, operating system software and applications software in response to evolving customer requirements. Our business and results of operations could be adversely affected if we do not anticipate or respond adequately to technological developments or changing customer requirements. We cannot assure you that any such investments in research and development will lead to any corresponding increase in revenue.

If We are Unable to Develop and Introduce New Products and Product Enhancements Successfully and in a Cost-Effective and Timely Manner, or to Achieve Market Acceptance of Our New Products, our Operating Results Would be Adversely Affected. We believe our revenue growth and future operating results will

depend on our ability to complete development of new products and enhancements, introduce these products in a timely, cost-effective manner, achieve broad market acceptance of these products and enhancements, and reduce our product costs. We may not be able to introduce any new products or any enhancements to our existing products on a timely basis, or at all. In addition, the introduction of any new products could adversely affect the sales of certain of our existing products.

Our future success will also depend in part on the success of several recently introduced products including CommSync II, a Zyfer solution for applying precision and timing and synchronization systems to high performance communication systems; AutoVue, our lane departure warning system; and AIRO 9.0, our broadcast automation solution. Market acceptance of our new products depends upon many factors, including our ability to accurately predict market requirements and evolving industry standards, our ability to resolve technical challenges in a timely and cost-effective manner and achieve manufacturing efficiencies, the perceived advantages of our new products over traditional products and the marketing capabilities of our independent distributors and strategic partners. Our business and results of operations could be seriously harmed by any significant delays in our new product development. Certain of our new products could contain undetected design faults and software errors or "bugs" when first released by us, despite our testing. We may not discover these faults or errors until after a product has been installed and used by our customers. Any faults or errors in our existing products or in any new products may cause delays in product introduction and shipments, require design modifications or harm customer relationships, any of which could adversely affect our business and competitive position.

Iteris currently outsources the manufacture of its AutoVue product line to a single manufacturer. This manufacturer may not be able to produce sufficient quantities of this product in a timely manner or at a reasonable cost, which could materially and adversely affect our ability to launch or gain market acceptance of AutoVue.

We Have Significant International Sales and Our International Business Operations May be Threatened by Many Factors That are Outside of Our Control. International sales represented 6% of our net sales and contract revenues for the three months ended June 30, 2002, 10% of our net sales and contract revenues for the fiscal year ended March 31, 2002 and 20% for the fiscal year ended March 31, 2001. During the fiscal year ended March 31, 2002, we reorganized our European operations, which included the discontinuation of our Odetics Europe Ltd., MAXxess Europe Ltd., Mariner France and Mariner Europe Ltd. operations, and the transition of our Broadcast and MAXxess international operations to branch office operations with the intent of lowering our international costs. This reorganization may result in significantly lower international sales in future periods and unanticipated liabilities related to the closures and we may not achieve the anticipated cost savings. We may also face challenges in managing and transitioning our international operations due to our limited experience operating through branch offices. In addition, the recent terrorist attacks in the United States and abroad and heightened security may adversely impact our international sales and could make our international operations more expensive.

International business operations are also subject to other inherent risks, including, among others:

- unexpected changes in regulatory requirements, tariffs and other trade barriers or restrictions;
- longer accounts receivable payment cycles;
- difficulties in managing and staffing international operations;
- potentially adverse tax consequences;
- the burdens of compliance with a wide variety of foreign laws;
- import and export license requirements and restrictions of the United States and each other country in which we operate;

- exposure to different legal standards and reduced protection for intellectual property rights in some countries;
- currency fluctuations and restrictions; and
- political, social and economic instability.

We believe that international sales will continue to represent a significant portion of our revenues, and that continued growth and profitability may require further expansion of our international operations. Nearly all of our international sales from this point on are denominated in U.S. dollars. As a result, an increase in the relative value of the dollar could make our products more expensive and potentially less price competitive in international markets. We do not engage in any transactions as a hedge against risks of loss due to foreign currency fluctuations.

Any of the factors mentioned above may adversely affect our future international sales and, consequently, affect our business, financial condition and operating results. Furthermore, as we increase our international sales, our total revenues may also be affected to a greater extent by seasonal fluctuations resulting from lower sales that typically occur during the summer months in Europe and other parts of the world.

Acquisitions of Companies or Technologies May Require Us to Undertake Significant Capital Infusions and Result in Disruptions of Our Business and Diversion of Resources and Management Attention. Over the past few years, we have expanded our operations and made several substantial acquisitions of diverse businesses, including Intelligent Controls, Inc., International Media Integration Services, Ltd., Meyer Mohaddes Associates, Inc., Viggen Corporation, and certain assets of the Transportation Systems business of Rockwell International. We may engage in acquisitions of complementary businesses, products and technologies. Acquisitions may require significant capital infusions and, in general, acquisitions also involve a number of special risks, including:

- potential disruption of our ongoing business and the diversion of our resources and management's attention;

- the failure to retain or integrate key acquired personnel;
- the challenge of assimilating diverse business cultures, and the difficulties in integrating the operations, technologies and information system of the acquired companies;
- increased costs to improve managerial, operational, financial and administrative systems and to eliminate duplicative services;
- the incurrence of unforeseen obligations or liabilities;
- potential impairment of relationships with employees or customers as a result of changes in management; and
- increased interest expense and amortization of acquired intangible assets.

Acquisitions may also materially and adversely affect our operating results due to large write-offs, contingent liabilities, substantial depreciation, deferred compensation charges or goodwill amortization, or other adverse tax or audit consequences. Our failure to manage growth and integrate our acquisitions successfully could adversely affect our business, financial condition and results of operations.

Our competitors are also soliciting potential acquisition candidates, which could both increase the price of any acquisition targets and decrease the number of attractive companies available for acquisition. We cannot assure you that we will be able to consummate any additional acquisitions, successfully integrate any acquisitions or realize the benefits anticipated from any acquisition.

The Markets in Which We Operate Are Highly Competitive and Have Many More Established Competitors, Which Could Adversely Affect Our Sales or the Market Acceptance of Our Products. We compete with numerous other companies in our target markets and we expect such competition to increase due to technological advancements, industry consolidations and reduced barriers to entry. Increased competition is likely to result in price reductions, reduced gross margins and loss of market share, any of which could seriously harm our business, financial condition and results of operations. Many of our competitors have far greater name recognition and greater financial, technological, marketing and customer service resources than we do. This may allow them to respond more quickly to new or emerging technologies and changes in customer requirements. It may also allow them to devote greater resources to the development, promotion, sale and support of their products than we can. Recent consolidations of end users, distributors and manufacturers in our target markets have exacerbated this problem. As a result of the foregoing factors, we may not be able to compete effectively in our target markets and competitive pressures could adversely affect our business, financial condition and results of operations.

We Do Not Have Employment Agreements with Any Key Personnel and We May be Unable to Attract and Retain Key Personnel, Which Could Seriously Harm Our Business. Due to the specialized nature of our business, we are highly dependent on the continued service of our executive officers and other key management, engineering and technical personnel, particularly Joel Slutzky, our Chairman of the Board, who recently retired as our Chief Executive Officer, and Gregory A. Miner, our Chief Executive Officer and Chief Financial Officer. The leadership transition between Mr. Slutzky and Mr. Miner could adversely affect our business. We do not have any employment contracts with any of our officers or key employees. The loss of any of these individuals could adversely affect our business, financial condition or results of operations.

Our success will also depend in large part upon our ability to continue to attract, retain and motivate qualified engineering and other highly skilled technical personnel. Competition for employees, particularly development engineers, is intense. We may not be able to continue to attract and retain sufficient numbers of such highly skilled employees. Our inability to attract and retain additional key employees or the loss of one or more of our current key employees could adversely affect our business, financial condition and results of operations.

We May Not be Able to Adequately Protect or Enforce Our Intellectual Property Rights, Which Could Harm Our Competitive Position. If we are not able to adequately protect or enforce the proprietary aspects of our technology, competitors could be able to access our proprietary technology and our business, financial condition and results of operations will likely be seriously harmed. We currently attempt to protect our technology through a combination of patent, copyright, trademark and trade secret laws, employee and third party nondisclosure agreements and similar means. Despite our efforts, other parties may attempt to disclose, obtain or use our technologies or solutions. Our competitors may also be able to independently develop products that are substantially equivalent or superior to our products or design around our patents. In addition, the laws of some foreign countries do not protect our proprietary rights as fully as do the laws of the United States. As a result, we may not be able to protect our proprietary rights adequately in the United States or abroad.

From time to time, we have received notices that claim we have infringed upon the intellectual property of others. Even if these claims are not valid, they could subject us to significant costs. We have engaged in litigation in the past, and litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation may also be necessary to defend against claims of infringement or invalidity by others. An adverse outcome in litigation or any similar proceedings could subject us to significant liabilities to third parties, require us to license disputed rights from others or require us to cease marketing or using certain products or technologies. We may not be able to obtain any licenses on terms acceptable to us, or at all. We also may have to indemnify certain customers or strategic partners if it is determined that

we have infringed upon or misappropriated another party's intellectual property. Any of these results could adversely affect our business, financial condition and results of operations. In addition, the cost of addressing any intellectual property litigation claim, both in legal fees and expenses, and the diversion of management resources, regardless of whether the claim is valid, could be significant and could seriously harm our business, financial condition and results of operations.

Some of Our Directors, Officers and Their Affiliates can Control the Outcome of Matters that Require the Approval of Our Stockholders, and Accordingly We Will Not be Able to Engage in Certain Transactions Without Their Approval. As of September 4, 2002, our officers and directors beneficially owned approximately 23% of the total combined voting power of the outstanding shares of our Class A common stock and Class B common stock. As a result of their stock ownership, our management will be able to significantly influence the election of our directors and the outcome of corporate actions requiring stockholder approval, such as mergers and acquisitions, regardless of how our other stockholders may vote. This concentration of voting control may have a significant effect in delaying, deferring or preventing a change in our management or change in control and may adversely affect the voting or other rights of other holders of common stock.

Our Stock Structure and Certain Anti-Takeover Provisions May Affect the Price of Our Common Stock and Discourage a Third Party from Acquiring Us. Certain provisions of our certificate of incorporation and our stockholder rights plan could make it difficult for a third party to acquire us, even though an acquisition might be beneficial to our stockholders. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. Our Class A common stock entitles the holder to one-tenth of one vote per share and our Class B common stock entitles the holder to one vote per share. The disparity in the voting rights between our common stock, as well as our insiders' significant ownership of the Class B common stock, could discourage a proxy contest or make it more difficult for a third party to effect a change in our management and control. In addition, our Board of Directors is authorized to issue, without stockholder approval, up to 2,000,000 shares of preferred stock with voting, conversion and other rights and preferences superior to those of our common stock, as well as additional shares of Class B common stock. Our future issuance of preferred stock or Class B common stock could be used to discourage an unsolicited acquisition proposal.

In March 1998, we adopted a stockholder rights plan and declared a dividend of preferred stock purchase rights to our stockholders. In the event a third party acquires more than 15% of the outstanding voting control of our company or 15% of our outstanding common stock, the holders of these rights will be able to purchase the junior participating preferred stock at a substantial discount off of the then current market price. The exercise of these rights and purchase of a significant amount of stock at below market prices could cause substantial dilution to a particular acquiror and discourage the acquiror from pursuing our company. The mere existence of a stockholder rights plan often delays or makes a merger, tender offer or proxy contest more difficult.

We Do Not Pay Cash Dividends. We have never paid cash dividends on our common stock and do not anticipate paying any cash dividends on either class of our common stock in the foreseeable future.

We May Be Subject to Additional Risks. The risks and uncertainties described above are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business operations.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 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.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC. Pursuant to the SEC rules, this prospectus, which forms a part of the registration statement, does not contain all of the information in such registration statement. You may read or obtain a copy of the registration statement from the SEC in the manner described above.

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 incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The documents we incorporate by reference are:

1. Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 filed with the SEC on August 14, 2002;

2. Our definitive Proxy Statement filed with the SEC on July 29, 2002 in connection with our 2002 Annual Meeting of Stockholders held on September 13, 2002;

3. Our Annual Report on Form 10-K for the fiscal year ended March 31, 2002 filed with the SEC on July 1, 2002;

4. Our Current Report on Form 8-K filed with the SEC on June 12, 2002;

5. The description of our Class A common stock contained in our registration statement on Form 8-A filed with the SEC on October 14, 1987, including any amendment or report filed for the purpose of updating such description; and

6. The description of our preferred stock purchase rights contained in our registration statement on Form 8-A filed with the SEC on May 1, 1998, including any amendment or report filed for the purpose of updating such description.

In addition, we incorporate by reference all reports and other documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus and prior to the termination of this offering and all such reports and documents will be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such reports and documents. Any statement incorporated herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide without charge to each person to whom this prospectus is delivered, upon written or oral request of such person, a copy of any or all of the foregoing documents incorporated herein by reference. Requests for documents should be submitted in writing to the Secretary, at Odetics, Inc., 1515 South Manchester Avenue, Anaheim, California 92802, or by telephone at (714) 774-5000.

FORWARD-LOOKING STATEMENTS

All statements included or incorporated by reference in this prospectus, other than statements or characterizations of historical fact, are forward-looking statements. Examples of forward-looking

statements include, but are not limited to, statements concerning projected expenses, growth in revenue from government contracts, our ability to control costs, our accounting estimates, assumptions and judgments, our investment in the development for our subsidiaries and business units, the market acceptance and performance of our products, the competitive nature of our markets, our ability to achieve product integration, the status of, and our ability to keep pace with, evolving technologies, the development and market acceptance of new product introductions, the adoption of future industry standards, our production capacity, our ability to consummate acquisitions and integrate their operations successfully, the need for additional capital, our ability to raise capital, and our ability to achieve profitability, monetize and spin-off or sell any of our business units. These forward-looking statements are based on our current expectations, estimates and projections about our industry, management's beliefs, and certain assumptions made by us. Forward-looking statements can often be identified by words such as "anticipates," "expects," "intends," "plans," "predicts," "believes," "seeks," "estimates," "may," "will," "should," "would," "potential," "continue," similar expressions and variations or negatives of these words. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. These forward-looking statements speak only as of the date of this prospectus and are based upon the information available to us at this time. Such information is subject to change, and we will not necessarily inform you of such changes. These statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors, some of which are listed under the section "Risk Factors" beginning on page 3 of this prospectus. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

USE OF PROCEEDS

The shares of Class A common stock offered by this prospectus will be sold by the selling stockholders, and the selling stockholders will receive all of the proceeds from sales of such shares. We will not receive any proceeds from sales of the shares offered by this prospectus.

SELLING STOCKHOLDERS

The following table sets forth the number of shares of our Class A common stock beneficially owned by the selling stockholders as of October 28, 2002, based on the selling stockholders' representations regarding their ownership. We cannot estimate the number of shares that will be held by the selling stockholders after completion of this offering because the selling stockholders may sell all or some of their shares and because there currently are no agreements, arrangements or understandings with respect to the sale of any of their shares. Except as indicated in this section, we are not aware of any material relationship between us and the selling stockholders within the past three years other than as a result of the selling stockholders' beneficial ownership of our common stock. On October 28, 2002, 14,080,914 shares of our Class A common stock were outstanding.

Selling Stockholders	Number of Shares	Number of Shares Being Offered in Offering	Beneficially Owned After Offering(1)	
			Number of Shares	Percent(2)
Tom Thomas(3)	19,000	19,000	—	—
John W. Seazholtz(4)	33,547	19,000	14,547	*
Paul Wright(5)	49,294	10,300	38,994	*
Patti S. Hart(6)	4,100	4,100	—	—
Aventuras II Partners(7)	31,879	31,879	—	—
Dean E. Wolf(8)	10,447	10,447	—	—
Kevin C. and Susan T. Daly TTEE(9)	16,000	16,000	—	—
Stradling Yocca Carlson and Rauth, a professional corporation(10)	104,893	104,893	—	—

* Represents less than 1%.

(1) This table assumes that all shares owned by the selling stockholders which are offered by this prospectus are being sold. The selling stockholders reserve the right to accept or reject, in whole or in part, any proposed sale of shares. The selling stockholders also may offer and sell less than the number of shares indicated. The selling stockholders are not making any representation that any shares covered by this prospectus will or will not be offered for sale.

(2) Based on 14,080,914 shares of Class A common stock outstanding on October 28, 2002.

(3) 19,000 shares were issued in payment of $16,750 in board fees owed by us and $15,500 in board fees owed by our wholly-owned subsidiary, Mariner Networks, Inc. Mr. Thomas is a member of our board of directors and from January 2000 to September 2001, he also served as the Chairman of the board of directors of Mariner Networks. The business of Mariner Networks was discontinued in September 2001.

(4) 19,000 shares were issued in payment of $17,500 in board fees owed by us and $14,750 in board fees owed by Mariner Networks. Mr. Seazholtz is a member of our board of directors and from March 2000 to September 2001, was also a member of the board of directors of Mariner Networks.

(5) 10,300 shares were issued in payment of $17,500 in board fees owed by us. Mr. Wright is a member of our board of directors and is also a member of the board of directors of our subsidiary, Iteris, Inc.

(6) 4,100 shares were issued in payment of $7,000 in board fees owed by Mariner Networks. Ms. Hart was formerly a member of the board of directors of Mariner Networks.

(7) 31,879 shares were issued to Aventuras II Partners, an affiliate of Beyer Weaver & Thomas, LLP, in consideration for the cancellation of $54,193 of outstanding legal fees and expenses. Beyer

Weaver & Thomas, LLP has served as intellectual property counsel for us and certain of our subsidiaries from time to time.

(8) Beyer Weaver & Thomas, LLP assigned $17,760 of the amount owed by us to Mr. Wolf. 10,447 shares were issued to Mr. Wolf in cancellation of such indebtedness.

(9) 9,411 shares were issued to Mr. Daly in payment of board fees owed to him by us and 6,589 shares were issued to Mr. Daly for services rendered as a member of our board in lieu of other director compensation to which he was entitled. Mr. Daly is a member of our board of directors.

(10) 104,893 shares were issued in consideration for the cancellation of $157,339 of outstanding legal fees and expenses. Stradling Yocca Carlson and Rauth has served as corporate counsel for us and certain of our subsidiaries from time to time.

The selling stockholders acquired the shares held by them and offered by this prospectus pursuant to agreements by which the selling stockholders cancelled indebtedness owed by us or our subsidiaries in consideration for the issuance of shares of our Class A common stock. The price of the Class A common stock to each of the selling stockholders was $1.70 per share, except that the price of the Class A common stock to Stradling Yocca Carlson and Rauth was $1.50 per share.

We agreed to effect a shelf registration (of which this prospectus is a part) to register all of these shares in order to permit the selling stockholders to sell these shares from time to time in the public market or in privately-negotiated transactions.

With respect to the shares of stock owned by Stradling Yocca Carlson and Rauth, we have agreed to prepare and file any amendments and supplements to the registration statement relating to these shares as may be necessary to keep the registration statement effective until the earlier of:

(i) the date on which all of the shares covered by this prospectus have been sold; and

(ii) the date on which all of the shares covered by this prospectus may be sold pursuant to Rule 144(k) under the Securities Act of 1933, as amended.

With respect to the shares of stock owned by the other selling stockholders, we have agreed to prepare and file any amendments and supplements to the registration statement relating to these shares as may be necessary to keep the registration statement effective until the earlier of (i) the date on which all of the shares covered by this prospectus have been sold, and (ii) two years after the date hereof.

This prospectus also covers any additional shares of Class A common stock which become issuable in connection with the shares being registered by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of Class A common stock. In addition, this prospectus covers the preferred stock purchase rights which currently trade with the Class A common stock and entitle the holder to purchase additional shares of Class A common stock under certain circumstances. See "Risk Factors—Our Stock Structure and Certain Anti-Takeover Provisions May Affect the Price of Our Common Stock and Discourage a Third Party from Acquiring Us."

PLAN OF DISTRIBUTION

We are registering the shares of Class A common stock covered by this prospectus on behalf of the selling stockholders. We will not receive any of the proceeds from sales of the shares by the selling stockholders.

The selling stockholders named in this prospectus, or pledgees, donees, transferees or other successors-in-interest selling shares received from the selling stockholders as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus, may sell or otherwise dispose of these shares from time to time. The selling stockholders will act independently of Odetics in making decisions with respect to the timing, manner and size of each disposition. The dispositions may be made on one or more exchanges or in the over-the-counter market or otherwise at prices and at terms then prevailing or at prices related to the then current market price or in negotiated transactions. The selling

stockholders may effect such transactions by selling their shares to or through broker-dealers. The shares may be sold by one or more of, or a combination of, the following:

- a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by such broker-dealer for its account under this prospectus;
- an exchange distribution in accordance with the rules of such exchange;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or
- in privately negotiated transactions.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. In effecting sales, broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in such resales.

The selling stockholder may enter into hedging transactions with broker-dealers in connection with distributions of the shares or otherwise. In such transactions, broker-dealers may engage in short sales of the shares in the course of hedging the positions they assume with the selling stockholder. The selling stockholder also may sell shares short and redeliver the shares to close out such short positions. The selling stockholder may enter into option or other transactions with broker-dealers which require the delivery to the broker-dealer of the shares. The broker-dealer may then resell or otherwise transfer such shares under this prospectus. The selling stockholder also may loan or pledge the shares to a broker-dealer. The broker-dealer may sell the shares so loaned, or upon a default the broker-dealer may sell the pledged shares under this prospectus.

Broker-dealers or agents may receive compensation in the form of commissions, discounts or concessions from the selling stockholders. Broker-dealers or agents may also receive compensation from the purchasers of the shares for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular broker-dealer might be in excess of customary broker-dealers or the selling stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with sales of the shares. Accordingly, any such commission, discount or concession 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. Because selling stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the selling stockholders will be subject to the prospectus delivery requirements of the Securities Act.

In addition, any securities covered by this prospectus which qualify for sale under Rule 144 promulgated under the Securities Act may be sold under Rule 144 rather than under this prospectus.

The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. There is no underwriter or coordinating broker acting in connection with the proposed sale of shares by the selling stockholders.

The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. 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 is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of such distribution. In addition, each selling stockholder will be subject to applicable provisions of the Exchange Act and the associated rules and regulations under the Exchange Act, including Regulation M, which provisions may limit the timing of purchase and sales of shares of our common stock by the selling stockholders. We will make copies of this prospectus available to the selling stockholders and have informed them of the need for delivery of copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

We will file a supplement to this prospectus, if required, under Rule 424(b) under the Securities Act upon being notified by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer. Such supplement will disclose:

- the name of each such selling stockholder and of the participating broker-dealer(s),
- the number of shares involved,
- the price at which such shares were sold,
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable,
- that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and
- other facts material to the transaction.

In addition, upon being notified by a selling stockholder that a donee or pledgee intends to sell more than 500 shares, we will file a supplement to this prospectus.

We will bear all costs, expenses and fees in connection with the registration of the shares. The selling stockholders will bear all commissions

and discounts, if any, attributable to the sales of their shares. The selling stockholders may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of their shares against certain liabilities, including liabilities arising under the Securities Act. In addition, we have agreed to indemnify the selling stockholders and their affiliates against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

The legality of the shares offered hereby will be passed upon for Odetics by Brobeck, Phleger & Harrison LLP, Irvine, California.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements and schedule included in our Annual Report on Form 10-K for the year ended March 31, 2002, as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about our ability to continue as a going concern as described in Note 1 to our consolidated financial statements), which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

We have not authorized any person to make a statement that differs from what is in this prospectus. If any person does make a statement that differs from what is in this prospectus, you should not rely on it. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state in which the offer or sale is not permitted. The information in this prospectus is complete and accurate as of its date, but the information may change after that date.

TABLE OF CONTENTS

ODETICS, INC.

213,316 Shares
of
Class A common stock

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various costs and expenses to be paid by us with respect to the sale and distribution of the securities being registered. All of the amounts shown are estimates except for the SEC registration fee. In addition, Odetics may be charged additional listing fees by the Nasdaq SmallCap Market upon issuance of the shares being offered by this prospectus.

SEC Registration Fee	$	13
Printing Expenses		2,000
Legal Fees and Expenses		5,000
Accounting Fees and Expenses		5,000
Miscellaneous		2,500
Total	$	14,513

We will bear all costs, expenses and fees in connection with the registration of the shares. The selling stockholders will bear all commissions and discounts, if any, attributable to the sales of their shares.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Under Section 145 of the Delaware General Corporation Law, Odetics can indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act. Odetics' bylaws provide that Odetics will indemnify its directors and officers to the fullest extent permitted by law and require Odetics to advance litigation expenses upon receipt by Odetics of an undertaking by the director or officer to repay such advances if it is ultimately determined that the director or officer is not entitled to indemnification. The bylaws further provide that rights conferred under such bylaws do not exclude any other right such persons may have or acquire under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

Odetics' certificate of incorporation provides that, under Delaware law, its directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to Odetics and its stockholders. This provision in the certificate of incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Odetics or its stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Odetics has entered into agreements to indemnify its directors, the directors of certain of its subsidiaries and certain of its officers in addition to the indemnification provided for in the certificate of incorporation and bylaws. These agreements, among other things, indemnify Odetics' directors and certain of its officers for certain expenses, attorneys' fees, judgments, fines and settlement amounts incurred by such person in any action or proceeding, including any action by or in the right of Odetics, on account of services as a director or officer of Odetics, or as a director or officer of any other company or enterprise to which the person provides services at the request of Odetics.

ITEM 16. EXHIBITS

EXHIBIT NUMBER	
4.1	Specimen of Class A common stock and Class B common stock certificates (incorporated by reference to Exhibit 4.3 to Amendment No. 1 to Odetics' Registration Statement on Form S-1 (Reg. No. 033-67932) as filed with the SEC on September 30, 1993).
4.2	Form of rights certificate for Odetics' preferred stock purchase rights (incorporated by reference to Exhibit A of Exhibit 4 to Odetics' Current Report on Form 8-K as filed with the SEC on May 1, 1998).
4.3	Form of Stock Purchase Agreement.
4.4	Stock Purchase Agreement dated March 31, 2002 between Odetics and Stradling Yocca Carlson and Rauth.
5.1	Opinion of Brobeck, Phleger & Harrison LLP.
23.1	Consent of Independent Auditors.
23.2	Consent of Brobeck, Phleger & Harrison LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included in signature page).

ITEM 17. UNDERTAKINGS

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;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment hereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this 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 price may be reflected in the form of prospectus filed with the SEC under Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement; provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by us pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, 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.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act each filing of Odetics' Annual Report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference into this 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.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of Odetics pursuant to the foregoing provisions, or otherwise, Odetics has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by Odetics of expenses incurred or paid by a director, officer or controlling person of Odetics 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, Odetics will, unless in the opinion of its counsel the question has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Anaheim, State of California, on the 4th day of November 2002.

ODETICS, INC.

By: /s/ GREGORY A. MINER

Gregory A. Miner,
Chief Executive Officer and Chief Financial Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Gregory A. Miner and Gary W. Smith, jointly and severally, as attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendment to this Registration Statement and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person hereby ratifying and confirming all that said attorneys-in-fact or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ GREGORY A. MINER Gregory A. Miner	Chief Executive Officer and Chief Financial Officer (principal executive officer and principal financial officer)	November 4, 2002
/s/ JOEL SLUTZKY Joel Slutzky	Chairman of the Board	November 4, 2002
/s/ KEVIN C. DALY Kevin C. Daly	Director	November 4, 2002
/s/ CRANDALL L. GUDMUNDSON Crandall L. Gudmundson	Director	November 4, 2002
/s/ JERRY F. MUENCH Jerry F. Muench	Director	November 4, 2002
/s/ JOHN W. SEAZHOLTZ John W. Seazholtz	Director	November 4, 2002
/s/ THOMAS L. THOMAS Thomas L. Thomas	Director	November 4, 2002
/s/ PAUL E. WRIGHT Paul E. Wright	Director	November 4, 2002
/s/ GARY W. SMITH Gary W. Smith	Vice President, Secretary and Controller (principal accounting officer)	November 4, 2002

INDEX OF EXHIBITS

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4.2	Form of rights certificate for Odetics' preferred stock purchase rights (incorporated by reference to Exhibit A of Exhibit 4 to Odetics' Current Report on Form 8-K as filed with the SEC on May 1, 1998).
4.3	Form of Stock Purchase Agreement.
4.4	Stock Purchase Agreement dated March 31, 2002 between Odetics and Stradling Yocca Carlson and Rauth.
5.1	Opinion of Brobeck, Phleger & Harrison LLP.
23.1	Consent of Independent Auditors.
23.2	Consent of Brobeck, Phleger & Harrison LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included in signature page).

QuickLinks

Exhibit 4.3

STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT (the "Agreement") is made and entered into this day of , 2002 by and between Odetics, Inc., a Delaware corporation ("Odetics") and ("Creditor").

NOW THEREFORE, in consideration of the foregoing and the agreements and covenants contained herein, the parties hereto agree as follows:

1. ***Purchase of Shares and Cancellation of Indebtedness.*** Odetics does hereby sell and issue to Creditor, and Creditor does hereby purchase from Odetics, shares of Common Stock (the "***Shares***") on the terms set forth herein at a purchase price of $1.70 per Share. Creditor hereby cancels $ of the Obligation (the "***Cancelled Debt***") as consideration for the aggregate purchase price for the Shares. Creditor agrees that Odetics shall have no further obligation to repay the Cancelled Debt.

2. ***Closing.*** The consummation of the sale of the Shares contemplated herein (the "***Closing***") shall occur simultaneously with the execution and delivery of this Agreement. The Closing shall be deemed completed when the parties hereto have delivered the consideration and documents required to be delivered by them as specified herein. Promptly upon receipt of the executed Agreement, Odetics agrees to instruct its transfer agent to issue the Shares to Creditor in accordance with the Creditor Issue Instructions attached hereto as Exhibit A.

3. ***Registration of the Shares.*** On or prior to one year from closing, Odetics agrees, at its own expense, to file a Registration Statement on Form S-3 with the Securities and Exchange Commission (the "***SEC***") to register all of the Shares. Odetics shall use its commercially reasonable best efforts to cause such Registration Statement to become effective and remain effective until the earlier of (i) such time as all of the Shares covered by such Registration Statement have been sold, or (ii) two years after the date thereof.

4. ***Representations and Warranties of Odetics.*** In order to induce Creditor to enter into this Agreement, Odetics hereby represents and warrants to Creditor as follows:

(a) *Authority.* Odetics has full legal right, power and authority to enter into this Agreement and to perform its obligations under this Agreement and to issue the Shares. This Agreement has been duly authorized, executed and delivered by Odetics, and assuming due authorization, execution and delivery by each of the other parties hereto, this Agreement is a valid and binding agreement on the part of Odetics, enforceable in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally or by general equitable principles.

(b) *Due Organization.* Odetics is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware, and has full power and authority to own and operate its properties and assets and to carry on its business as presently conducted.

(c) *Validity of the Shares.* The Shares, when issued, sold and delivered in compliance with the provisions of this Agreement, will be duly and validly issued, fully paid and non-assessable, and will be free of any liens, or encumbrances; provided, however, that the Shares will be subject to restrictions on transfer under state and/or federal securities laws as set forth herein or as otherwise required by such laws at the time a transfer is proposed.

5. ***Representations and Warranties of Creditor.*** In order to induce Odetics to enter into this Agreement, Creditor hereby represents and warrants to Odetics as follows:

(a) *Authority*. Creditor has full legal right, power and authority to enter into this Agreement and to perform its obligations under this Agreement and to issue the Shares. This Agreement has been duly authorized, executed and delivered by Creditor, and assuming due authorization,

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execution and delivery by each of the other parties hereto, this Agreement is a valid and binding agreement on the part of Creditor, enforceable in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally or by general equitable principles. Creditor has not transferred or assigned any of its rights to the Cancelled Debt and no third party other than Creditor has the right to enforce Odetics' obligations under the Cancelled Debt.

(b) *Investment Representations.* Creditor is acquiring the Shares for investment for Creditor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof. Creditor is an "accredited investor" within the meaning of Rule 501 of Regulation D, as presently in effect, promulgated pursuant to the Securities Act of 1933, as amended (the ***"Act"***). Creditor is a corporation, business trust or partnership, that was not formed for the purpose of acquiring the Shares, and has total assets in excess of $5,000,000. Creditor has had an opportunity to ask questions and receive answers from Odetics' management regarding the business, properties, prospects and financial condition of Odetics.

(c) *Legends.* The Creditor acknowledges that the Shares are "restricted securities" under the Act and agrees that in addition to any other legend that may be required by federal or state securities laws, each certificate representing any of the Shares issued pursuant to this Agreement shall bear a legend in substantially the following form:

> THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"). THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT WITH RESPECT TO THE SHARES OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH

REGISTRATION IS NOT REQUIRED.

6. ***Entire Agreement; Governing Law; Headings.*** This Agreement and the exhibit attached hereto contain the entire agreement of the parties hereto as to its subject matter, and can only be modified or amended by a written agreement signed by all of the parties hereto. This Agreement shall be governed and interpreted in accordance with the laws of the State of California without regard to the conflicts of law provisions thereof. The headings of the sections and paragraphs of this Agreement have been inserted for convenience of reference only and do not constitute a part of this Agreement

7. ***Notices.*** Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given and received by the party to be notified (i) upon personal delivery to the party to be notified; (ii) when sent by confirmed facsimile if sent during normal business hours of the recipient (if not sent during normal business hours, then on the next business day); (iii) three (3) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All such notices shall be sent: (a) if to Creditor, addressed to Creditor at its address shown on the Creditor Issue Instructions attached as Exhibit A hereto, or at such other address as Creditor may specify by written notice to Odetics, or (b) if to Odetics, at the address set forth below its signature or at such other address as the Odetics may specify by providing written notice to the Creditor.

IN WITNESS WHEREOF, this Agreement has been executed to be effective as of the date and year first above written. This Agreement may be executed by facsimile signature and in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

ODETICS, INC.

By: _____

Gregory A. Miner,
Chief Executive Officer and
Chief Financial Officer

Address: 1515 South Manchester Avenue
Anaheim, California 92802-2907
Attention: Chief Executive Officer

Facsimile No.: (714) 780-7857

CREDITOR:

_____

Print Name

By: _____

Title: _____

EXHIBIT A

Creditor Issue Instructions

The Creditor shall complete the following:

1. The exact name that the Shares are to be registered in (this is the name that will appear on your Shares certificate(s)): _____

2. The mailing address and facsimile number of the Registered Holder listed in response to Item 1 above (if different from above):

Facsimile:

3. **(For United States Investors:)** The Social Security Number or Tax Identification Number of the Registered Holder listed in the response to Item 1 above:

4. Indicate the number of shares of Class A and Class B Common Stock of Odetics that your currently beneficially own (other than the Shares being purchased pursuant to this Agreement) and indicate the capacity in which such shares are held:

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Exhibit 4.4

STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT (the "Agreement") is entered into as of March 31, 2002 by and between Odetics, Inc., a Delaware corporation (the "Corporation"), and Stradling Yocca Carlson and Rauth, a professional corporation (the "Purchaser").

R E C I T A L S:

A. Purchaser has performed legal services for the Corporation and is owed as of February 28, 2002, One Hundred Fifty Seven Thousand Three Hundred Thirty Nine Dollars and Forty One Cents ($157,339.41) in legal fees (the "Indebtedness").

B. The Corporation desires to issue to the Purchaser and Purchaser wishes to receive shares of the Common Stock of the Corporation in exchange for the cancellation of the legal fees owed to Purchaser in accordance with the terms set forth herein.

NOW, THEREFORE, for good and valuable consideration, the sufficiency and adequacy of which are hereby acknowledged, and in consideration of the terms, covenants and conditions set forth herein, the parties hereby agree as follows:

1. ***Purchase and Sale of Shares.*** Subject to the terms and conditions of this Agreement, the Corporation hereby agrees to sell to the Purchaser and the Purchaser agrees to purchase from the Corporation 104,893 shares of the Corporation's Common Stock, $.001 par value (the "Shares"), for the consideration set forth in Section 2 hereof.

2. ***Consideration.*** In exchange for the sale and issuance of the Shares, the Purchaser shall cancel and terminate the Indebtedness of the Corporation to the Purchaser.

3. ***Representations and Warranties of the Purchasers.*** The Purchaser hereby makes the following representations and warranties to the Corporation:

3.1 Purchaser is acquiring the Shares for its own account, for investment purposes and not with a view to or for sale in connection with any distribution of any part of the Shares.

3.2 Purchaser is an "accredited investor" within the meaning of Regulation D promulgated under the Securities Act of 1933, as amended (the "1933 Act").

3.3 The Corporation has advised the Purchaser that the Shares have not been registered under the Securities Act of 1933 (the "Act"), as the offering of the Shares is to be effected pursuant to an exemption from the registration provisions of the Act, and similar exemptions under applicable state securities laws, and, in this connection, the Corporation is relying in part on the representations of the Purchaser set forth herein.

3.4 Without in any way limiting the representations set forth above, Purchaser further agrees in no event to make any disposition of all or any part of the Shares unless and until (i) such Purchaser shall have notified the Corporation of the proposed disposition; (ii) such Purchaser shall have furnished the Corporation with an opinion of counsel to the effect that such disposition will not require registration under the Act, and (iii) such opinion of counsel shall have been concurred in by the Corporation's counsel and the Corporation shall have advised such Purchaser of such concurrence.

3.5 Purchaser acknowledges receipt of all information as such Purchaser deems necessary and appropriate to enable such Purchaser to make an informed decision with respect to his or her acquisition of the Shares, including information concerning the business and financial condition of the Corporation, and has had the opportunity to discuss such information and ask questions regarding the Corporation and the Shares, all as he or she has found necessary to make an informed investment decision.

3.6 Purchaser represents that he or she is an investor of sufficient sophistication and experience to make an informed investment decision regarding the acquisition of the Shares, and certifies that his or her financial situation is such that he or she is able to bear the economic risk of an investment in the Shares.

3.7 Purchaser is an executive officer and a director of the Corporation.

3.8 Purchaser recognizes that the Shares must be held indefinitely unless they are subsequently registered under the Act or an exemption from such registration is available, and further recognizes that the Corporation is under no obligation to register the Shares or to comply with any exemption from such registration.

3.9 Each Purchaser understands and agrees that the certificate evidencing the Shares will bear a legend substantially as follows:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933; THEY HAVE BEEN ACQUIRED BY THE HOLDER FOR INVESTMENT AND MAY NOT BE PLEDGED, HYPOTHECATED, SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF EXCEPT AS MAY BE AUTHORIZED UNDER THE SECURITIES ACT OF 1933, AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER.

4. ***Representations and Warranties of the Corporation.*** The Corporation hereby makes the following representations and warranties to

the Purchaser:

4.1 *Corporate Organization, Standing, Power and Authority.* The Corporation is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and is authorized to conduct business in each jurisdiction in which the character of the properties owned by it or the nature of its business makes such authorization necessary and where the failure to be so qualified would have a material adverse effect on the Corporation. The Corporation has the requisite corporate power and authority to conduct its business as now conducted and to own or lease (as the case may be), and to use, the properties and assets used therein in the same manner as such properties and assets have been used since its inception.

4.2 *Power to Execute Agreement.* The Corporation has the requisite power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby. This Agreement has been duly and validly executed and delivered by the Corporation and, assuming this Agreement constitutes the valid and binding agreement of Purchaser, constitutes the valid and binding agreement of the Corporation, enforceable against the Corporation in accordance with its terms, except that the enforcement hereof may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect relating to creditors' rights generally and (b) general principles of equity (regardless of whether enforceability is considered in a proceeding in equity or at law).

4.3 *Validity of Shares.* The Shares, when issued, sold and delivered in compliance with the provisions of this Agreement, will be validly issued, fully paid and nonassessable, and will be free of any liens or encumbrances; provided, however, that the Shares may be subject to restrictions on transfer under state and/or federal securities laws as set forth herein or as otherwise required by such laws at the time a transfer is proposed.

4.4 *Consents of Third Parties.* The execution, delivery and performance of this Agreement, and the performance by Corporation of their obligations hereunder and thereunder, will not (i) violate or conflict with the Certificate of Incorporation or by-laws or other charter documents of the Corporation, (ii) conflict with, or result in the breach of, or termination of, or constitute a default under (whether with notice or lapse of time or both), or accelerate or permit the

acceleration of the performance required by, any indenture, loan or credit agreement, note, bond, mortgage, lien, lease, agreement, commitment, permit, concession, franchise, or license or other instrument, or any order, judgment or decree, to which the Corporation are a party or by which the Corporation or any of its properties are bound, (iii) constitute a violation of any law, regulation, statute, ordinance, order, writ, judgment, injunction or decree applicable to the Corporation or (iv) result in the creation of any lien, charge or encumbrance upon the capital stock, properties or assets of the Corporation, other than violations, conflicts, breaches, terminations, accelerations and defaults specified in the foregoing clauses (ii) through (iv) which would not materially and adversely affect the Corporation's ability to perform its obligations under this Agreement or have any change or effect that has been, is or, as far as can reasonably be foreseen, may be materially adverse to the businesses, operations, assets, results of operation or financial condition of the Corporation. No consent, approval or authorization of any governmental authority is required on the part of the Corporation in connection with the execution, delivery and performance of this Agreement.

5. *Registration.*

5.1 *Mandatory Registration.* The Corporation will use best efforts to file with the SEC a registration statement pursuant to the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (the "Securities Act") (the "Registration Statement") on Form S-3 registering the Shares for resale no later than September 30, 2002 (the "Filing Date"). If Form S-3 is not available at that time, then the Corporation will file a Registration Statement on such form as is then available to effect a registration of the Shares, subject to the consent of the Purchaser, which consent will not be unreasonably withheld.

5.2 *Effectiveness of the Registration Statement.* The Corporation will use its best efforts to cause the Registration Statement to be declared effective by the SEC as soon as practicable after filing, and in any event no later than the 90th day after the Filing Date (the "Required Effective Date"). However, so long as the Corporation filed the Registration Statement within 30 business days after the Filing Date, (a) if the SEC takes the position that registration of the resale of the Shares by the Purchaser is not available under applicable laws, rules and regulation and that the Corporation must register the offering of the Shares as a primary offering by the Corporation, or (b) if the Registration Statement receives SEC review, then the Required Effective Date will be the 120th day after the Filing Date. In the case of an SEC response described in clause (a), the Corporation will, within 40 business days after the date the Corporation receives such SEC response, file a Registration Statement as a primary offering. The Corporation's best efforts will include, but not be limited to, promptly responding to all comments received from the staff of the SEC. If the Corporation receives notification from the SEC that the Registration Statement will receive no action or review from the SEC, then the Corporation will cause the Registration Statement to become effective within five business days after such SEC notification. Once the Registration Statement is declared effective by the SEC, the Corporation will cause the Registration Statement to remain effective until sold or saleable under Rule 144 without restrictions on volume (the "Registration Period"), except as permitted under Section 6.1.

5.3 *Piggyback Registrations.*

(a) If, at any time prior to the expiration of the Registration Period, a Registration Statement is not effective with respect to all of the Shares and the Corporation decides to register any of its securities for its own account or for the account of others, then the Corporation will promptly give the Purchaser written notice thereof and will use its best efforts to include in such registration all or any part of the Shares requested by such Purchaser to be included therein (excluding any Shares previously included in a Registration Statement). This requirement does not apply to Corporation registrations on Form S-4 or S-8

or their equivalents relating to equity securities to be issued solely in connection with an acquisition of any entity or business or

equity securities issuable in connection with stock option or other employee benefit plans. The Purchaser must give its request for registration under this paragraph to the Corporation in writing within 15 days after receipt from the Corporation of notice of such pending registration. If the registration for which the Corporation gives notice is a public offering involving an underwriting, the Corporation will so advise the Purchaser as part of the above-described written notice. In that event, if the managing underwriter(s) of the public offering impose a limitation on the number of shares of Common Stock that may be included in the Registration Statement because, in such underwriter(s)' judgment, such limitation would be necessary to effect an orderly public distribution, then the Corporation will be obligated to include only such limited portion, if any, of the Shares with respect to which such Purchaser has requested inclusion hereunder. Any exclusion of Shares will be made pro rata among all holders of the Corporation's securities seeking to include shares of Common Stock in proportion to the number of shares of Common Stock sought to be included by those holders. However, the Corporation will not exclude any Shares unless the Corporation has first excluded all outstanding securities the holders of which are not entitled by right to inclusion of securities in such Registration Statement or are not entitled pro rata inclusion with the Shares.

(b) No right to registration of Shares under this Section 5.3 limits in any way the registration required under Section 5.1 above. The obligations of the Corporation under this Section 5.3 expire upon the earlier of (i) the effectiveness of the Registration Statement filed pursuant to Section 5.1 above, (ii) after the Corporation has afforded the opportunity for the Purchaser to exercise registration rights under this Section 5.3 for two registrations (provided, however, that the Purchaser has had any Shares excluded from any Registration Statement in accordance with this Section 5.3 may include in any additional Registration Statement filed by the Corporation the Shares so excluded), (iii) when all of the Shares held by the Purchaser may be sold by the Purchaser under Rule 144 without being subject to any volume restrictions.

5.4 *Eligibility to use Form S-3.* The Corporation represents and warrants that it meets the requirements for the use of Form S-3 for registration of the sale by the Purchaser of the Shares. The Corporation will file all reports required to be filed by the Corporation with the SEC in a timely manner so as to preserve its eligibility for the use of Form S-3.

6. *Additional Obligations of the Corporation.*

6.1 *Continued Effectiveness of Registration Statement.* The Corporation will keep the Registration Statement covering the Shares effective under Rule 415 of the Securities Act at all times during the Registration Period. In the event that the number of shares available under a Registration Statement filed pursuant to this Agreement is insufficient to cover all of the Shares issued, the Corporation will (if permitted) amend the Registration Statement or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover all of the Shares. The Corporation will file such amendment or new Registration Statement as soon as practicable, but in no event later than 30 business days after the necessity therefor arises (based upon the market price of the Common Stock and other relevant factors on which the Corporation reasonably elects to rely). The Corporation will use its best efforts to cause such amendment or new Registration Statement to become effective as soon as is practicable after the filing thereof, but in no event later than 90 days after the date on which the Corporation reasonably first determines the need therefor.

6.2 *Accuracy of Registration Statement.* Any Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) filed by the Corporation covering Shares will not contain any untrue statement of a material fact or omit to state a material

fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading. The Corporation will prepare and file with the SEC such amendments (including post-effective amendments) and supplements to the Registration Statement and the prospectus used in connection with the Registration Statement as may be necessary to permit sales pursuant to the Registration Statement at all times during the Registration Period, and, during such period, will comply with the provisions of the Securities Act with respect to the disposition of all Shares of the Corporation covered by the Registration Statement until the termination of the Registration Period, or if earlier, until such time as all of such Shares have been disposed of in accordance with the intended methods of disposition by the seller or Corporation thereof as set forth in the Registration Statement.

6.3 *Furnishing Documentation.* The Corporation will furnish to the Purchaser (a) promptly after such document is filed with the SEC, one copy of any Registration Statement filed pursuant to this Agreement and any amendments thereto, each preliminary prospectus and final prospectus and each amendment or supplement thereto; and (b) a number of copies of a prospectus, including a preliminary prospectus, and all amendments and supplements thereto, and such other documents as the Purchaser may reasonably request in order to facilitate the disposition of the Shares owned by the Purchaser. The Corporation will promptly notify by facsimile or email the Purchaser of the effectiveness of the Registration Statement and any post-effective amendment.

6.4 *Additional Obligations.* The Corporation will use its best efforts to (a) register and qualify the Shares covered by a Registration Statement under such other securities or blue sky laws of such jurisdictions as each Investor who holds (or has the right to hold) Shares being offered reasonably requests, (b) prepare and file in those jurisdictions any amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain their effectiveness during the Registration Period, (c) take any other actions necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (d) take any other actions reasonably necessary or advisable to qualify the Shares for sale in such jurisdictions. Notwithstanding the foregoing, the Corporation is not required, in connection such obligations, to (i) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 6.4, (ii) subject itself to general taxation in any such jurisdiction, (iii) file a general consent to service of process in any such jurisdiction, (iv) provide any undertakings that cause material expense or burden to the Corporation, or (v) make any change in its charter or bylaws, which in each case the Board of Directors of the Corporation determines to be contrary to the best interests of the Corporation and its stockholders.

6.5 *Expenses of Registration.* The Corporation will bear all reasonable expenses, other than underwriting discounts and commissions, and transfer taxes, if any, incurred in connection with registrations, filings or qualifications pursuant to Sections 5 and 6 of this Agreement, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees.

7. *Miscellaneous.*

7.1 *Further Assurances.* Each party hereto agrees to execute any and all documents reasonably required in order to carry out the purposes of this Agreement.

7.2 *Assignment.* Neither this Agreement nor any of the rights and obligations of the parties hereto shall be assignable without the prior written consent of the other party.

7.3 *Entire Agreement.* This Agreement embraces and includes the entire transaction and agreement between the parties hereto with respect to the subject matter hereof, and any prior contract or agreement between the parties hereto with respect to such subject matter shall hereby be cancelled and shall be of no further force or effect.

7.4 *Amendment; Waiver.* This Agreement may be amended, and any provision hereof may be waived, only by a written instrument signed by the Corporation and the Purchaser.

7.5 *Notice.* Any notice required or permitted to be given under this Agreement shall be sufficient if in writing and if sent by certified mail, first class postage prepaid, or delivered personally or by telex, telegram or facsimile to the Purchaser or to the Corporation at the address set forth below across from their names or at such other place as the Purchaser or the Corporation may otherwise designate in writing.

7.6 *Counterparts.* This Agreement may be executed in facsimile and in any number of counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument.

7.7 *Headings.* The headings in this Agreement are for convenience of reference only and shall not affect the construction or interpretation of any of its provisions.

7.8 *Severability.* If any provision of this Agreement shall be held to be unenforceable or invalid by any court of competent jurisdiction, such finding shall not affect the validity of the other provisions hereof and the invalid provision shall be deemed to have been severed herefrom.

7.9 *Governing Law; Jurisdiction.* This Agreement will be governed by and interpreted in accordance with the laws of the State of California without regard to the principles of conflict of laws. The parties hereto hereby submit to the exclusive jurisdiction of the United States federal and state courts located in Orange County, California with respect to any dispute arising under this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

CORPORATION:

Address: 1515 South Manchester Ave.
Anaheim, CA 92802

ODETICS, INC., a Delaware corporation

By: /s/ GREGORY A. MINER

Gregory A. Miner,
Chief Executive Officer

PURCHASER:

Address: 660 Newport Center Drive
Suite 1600
Newport Beach, CA 92660

STRADLING YOCCA CARLSON & RAUTH

/s/ C. CRAIG CARLSON

C. Craig Carlson,
Vice President

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Exhibit 4.4

STOCK PURCHASE AGREEMENT

RECITALS

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Exhibit 5.1

November 4, 2002

Odetics, Inc.
1515 South Manchester Avenue
Anaheim, California 92802

Re: Odetics, Inc. Registration Statement on Form S-3 for the Resale of 213,316 Shares of Class A Common Stock

Ladies and Gentlemen:

We have acted as counsel to Odetics, Inc., a Delaware corporation ("Odetics"), in connection with the registration for resale of up to an aggregate of 213,316 (the "Shares") of Odetics' Class A common stock pursuant to Odetics' Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act").

This opinion is being furnished in accordance with the requirements of Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K.

We have reviewed Odetics' charter documents and the corporate proceedings taken by Odetics in connection with the issuance and sale of the Shares. Based on such review, we are of the opinion that the Shares have been duly authorized, and are legally issued, nonassessable and, to our knowledge, are fully paid.

We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the prospectus which is part of the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder or Item 509 of Regulation S-K.

This opinion letter is rendered as of the date first written above and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to Odetics or the Shares.

Very truly yours,

/s/ BROBECK, PHLEGER & HARRISON LLP

Brobeck, Phleger & Harrison LLP

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Exhibit 5.1

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Exhibit 23.1

Consent of Independent Auditors

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Odetics, Inc. for the registration of 213,316 shares of its Class A common stock and to the incorporation by reference therein of our report dated May 22, 2002, except for Note 1, as to which the date is May 29, 2002, with respect to the consolidated financial statements and schedule of Odetics, Inc. included in its Annual Report (Form 10-K) for the year ended March 31, 2002, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Irvine, California
October 30, 2002
