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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

ODETICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

95-2588496
(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)

JOEL SLUTZKY

Chairman of the Board and Chief Executive 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)

Copies to:

Patrick Arrington, Esq.
Ellen S. Bancroft, Esq.
Brobeck, Phleger & Harrison LLP
38 Technology Drive
Irvine, California 92618
(949) 790-6300

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	Amount of Registration Fee
Class A Common Stock, \$0.10 par value per share	173,214	\$5.28	\$914,570	\$270

- (1) Estimated solely for the purpose of computing the registration fee required by Section 6(b) of the Securities Act and computed pursuant to Rule 457(c) under the Securities Act based upon the average of the high and low prices of the Company's Class A Common Stock on September 17, 1998, as reported on The Nasdaq National Market.

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.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This Prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such State.

PROSPECTUS
(Subject to completion, dated September 21, 1998)
173,214 Shares
ODETICS, INC.
Class A Common Stock

This Prospectus relates to the offering, which is not being underwritten, of 173,214 shares of Class A Common Stock, \$0.01 par value per share (the "Shares"), of Odetics, Inc. ("Odetics" or the "Company") by certain stockholders of the Company (the "Selling Stockholders"). The Selling Stockholders received the Shares in connection with Odetics' acquisition of International Media Integration Systems Limited ("IMIS"). The Shares were issued pursuant to an exemption from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"). The Shares are being registered by the Company pursuant to registration rights granted by the Company to the Selling Stockholders. The Company has agreed, among other things, to bear certain expenses (other than fees and expenses of counsel, any underwriting discounts and commission and brokerage commissions and fees) in connection with the registration and sale of the Shares being offered by the Selling Stockholders.

The sale of the Shares may be effected by the Selling Stockholders from time to time in transactions on the Nasdaq National Market or otherwise, in negotiated transactions or a combination of such methods of sale, at fixed prices which may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. The Shares may be sold by one or more of the following: (i) a block trade in which the broker or 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; (ii) purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this Prospectus; (iii) an exchange distribution in accordance with the rules of such exchange; or (iv) ordinary brokerage transactions and transactions in which the broker solicits purchasers. The Selling Stockholders have established individual accounts with Cruttenden Roth Incorporated ("Cruttenden"), who has agreed to act as distribution agent in connection with the distribution of the Shares. Cruttenden has represented that it will not receive any compensation in excess

of usual and customary sellers' commissions. In effecting sales, Cruttenden or any other brokers or dealers engaged by the Selling Stockholders may arrange for other brokers or dealers to participate. Brokers or dealers will receive commissions or discounts from Selling Stockholders in amounts to be negotiated immediately prior to the sale. Such brokers or dealers and any other participating brokers or dealers may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), in connection with such sales. In addition, any securities covered by this Prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this Prospectus. The Company has also agreed to bear certain expenses in connection with the registration and sale of the Shares offered hereby by the Selling Stockholders (other than broker discounts and commissions). See "Selling Stockholders" and "Plan of Distribution."

None of the proceeds from the sale of the Shares by the Selling Stockholders will be received by the Company. See "Selling Stockholders."

The Company has two classes of Common Stock, the Class A Common Stock and the Class B Common Stock (collectively, the "Common Stock"). The rights, preferences and privileges of each class of Common Stock are identical in all respects except for voting rights. The holders of the Class A Common Stock are presently entitled to elect three directors to the Company's Board of Directors and have one-tenth of one vote per share held with respect to all other matters to be addressed by a stockholder vote. The holders of the Class B Common Stock are presently entitled to elect six directors and have one vote per share on all other matters addressed by a stockholder vote. The Company's Class A Common Stock is quoted on the Nasdaq National Market under the symbol "ODETA." On September 17, 1998, the last reported sale price of the Company's Class A Common Stock on the Nasdaq National Market was \$5 3/8 per share.

The Selling Stockholders and any broker-dealers, agents or underwriters that participate with the Selling Stockholders in the distribution of Shares may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, and any commissions received by them and any profit on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. See "Plan of Distribution" for a description of indemnification arrangements.

The Class A Common Stock offered hereby involves a high degree of risk. See "Risk Factors" on page 4 for information that should be considered by prospective investors.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is _____, 1998.

No person has been authorized to give any information or to make any representations other than those contained in this Prospectus in connection with the offering made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by the Company, any Selling Stockholder or by any other person. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that information herein is correct as of any time subsequent to the date hereof. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy the Shares to any person or by anyone in any jurisdiction in which such offer or solicitation may not lawfully be made.

AVAILABLE INFORMATION

The Company is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as applicable to issuers such as the Company, and in accordance therewith files annual and quarterly reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other

information may be inspected at the Commission's Public Reference Section, Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, as well as at the Commission's regional offices at 7 World Trade Center, 13th Floor, New York, New York 10048; and at Northwest Atrium Center, 500 West Madison Street, Room 1400, Chicago, Illinois 60661-2511. Copies of such material can also be obtained at prescribed rates at the Public Reference Room of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. Information on the operations of the Public Reference Room can be obtained by calling the Commission at 1-800-SEC-0330. The Commission maintains an Internet site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding registrants, including the Company, that file electronically with the Commission.

This Prospectus constitutes a part of a Registration Statement on Form S-3 (herein, together with all amendments and exhibits, referred to as the "Registration Statement") filed by the Company with the Commission under the Securities Act. This Prospectus does not contain all of the information set forth in the Registration Statement, certain parts of which are omitted in accordance with the rules and regulations of the Commission. For further information with respect to the Company and the shares of Common Stock offered hereby, reference is hereby made to the Registration Statement. The Registration Statement may be inspected at the public reference facilities maintained by the Commission at the addresses set forth in the preceding paragraph. Statements contained herein concerning any document filed as an exhibit are not necessarily complete and, in each instance, reference is made to the copy of such document filed as an exhibit to the Registration Statement. Each such statement is qualified in its entirety by such reference.

INFORMATION INCORPORATED BY REFERENCE

The following documents filed by the Company with the Commission (Commission File No. 0-10605) are hereby incorporated by reference in this Prospectus:

- (1) The Annual Report of the Company on Form 10-K, as amended, for the fiscal year ended March 31, 1998;
- (2) The Quarterly Report of the Company on Form 10-Q for the fiscal quarter ended June 30, 1998;
- (3) The definitive Proxy Statement filed with the Commission on July 29, 1998 in connection with the Company's 1998 Annual Meeting of Stockholders;
- (4) The Current Report of the Company on Form 8-K for an event as of April 29, 1998 (filed May 1, 1998); and
- (5) The description of the Company's Class A Common Stock contained in the Company's Registration Statement on Form 8-A filed with the Commission on October 14, 1987 pursuant to Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating such.

All reports and other documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the termination of this Offering shall 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.

The Company 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 (other than the exhibits to such documents, unless such exhibits are specifically incorporated by reference

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into such document). Requests for such 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.

THE COMPANY

Odetics, Inc. (the "Company") was founded in 1969 to supply digital

recorders for use in the United States space program. In the 1970s, the Company broadened its information automation product line to include time-lapse videocassette recorders for commercial and industrial security and surveillance applications. Through the Company's Gyyr Division, it became a leading supplier of time-lapse videotape cassette recorders, digital image processing modules and related products used in security and surveillance systems. The Company incorporated its Gyyr Division in 1997, forming a wholly owned subsidiary, Gyyr Incorporated. ("Gyyr"). In October 1997, the Company expanded Gyyr by acquiring Intelligent Controls Inc. ("ICI"), a manufacturer of access control products specializing in PC based, remote site and fiber optic communications.

Leveraging the Company's expertise in video image processing, the Company introduced a video vehicle detection system in 1993, representing the Company's first product for use in intelligent transportation systems. In June 1997, the Company acquired certain assets comprising the Transportation Systems business from Rockwell International, creating the Company's ITS Division, which expanded the Company's offerings to include Advanced Traffic Management Systems and Advanced Traveler Information Systems. The Company recently incorporated its ITS Division as Odetics ITS, Inc. ("ITS").

In the early 1980s, the Company set out to develop the technical expertise to apply automation to new commercial applications and established its Broadcast Division. The Broadcast Division develops and manufactures broadcast automation control systems and pioneered the use of large library cart machines in broadcast television stations and satellite uplink operations. The success of the Company's cart machines led the Company to pursue new applications for information automation technologies, including a 19mm automated tape cartridge handling subsystem. In 1991, in a strategic move to expand its business into new and potentially larger markets, the Company introduced an automated tape handling subsystem for integration into tape libraries designed for midrange computers and client/server networks. In January 1993, the Company formed a separate subsidiary, ATL Products, Inc. ("ATL") 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. The Company distributed its remaining 82.9% interest in ATL to the Company's stockholders in a tax-free distribution (the "Distribution") in October 1997.

The Company is a leading supplier of communications equipment and services for the television broadcast, video security, telecommunications and intelligent traffic solutions markets. The Company's products automate television and cable station operations, facilitate broadband communications, record video surveillance, store information gathered in space exploration and reduce traffic congestion.

The Company's principal executive offices are located at 1515 South Manchester Avenue, Anaheim, California 92802, and its telephone number is (714) 774-5000.

FORWARD-LOOKING STATEMENTS

This Prospectus and the documents incorporated herein by reference contain forward-looking statements that are based on current expectations, estimates and projections about the Company's industry, management's beliefs, and assumptions made by management. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates" and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any such forward-looking statements. Such risks and uncertainties include those noted in "Risk Factors" below and in the documents incorporated herein by reference. The Company undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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RISK FACTORS

In addition to the other information contained in this Prospectus, the following Risk Factors should be considered carefully in evaluating an investment in the shares of Common Stock offered by this Prospectus

Fluctuations in Quarterly Operating Results. The Company has experienced

recent losses and wide fluctuations in quarterly and annual operating results in the past and may continue to experience losses and fluctuations in the future based on a number of factors, not all of which are in the Company's control. These factors include, without limitation, the size and timing of significant customer orders; the introduction of new products by competitors; the availability of components used in the manufacture of the Company's products; the Company's expenditure of substantial funds for research and development for its subsidiaries and divisions; changes in pricing policies by the Company, its suppliers or its competitors and increased price competition; the ability of the Company to develop, introduce, market and gain market acceptance of new products (particularly the Roswell, Dexter, Vortex, Digi Scan Pro, Vantage One and Lane Tracker), applications and product enhancements in a timely manner and to control costs; the long lead times associated with government contracts or required by vehicle manufacturers; the Company's success in expanding and implementing its sales and marketing programs; technological changes in the markets in which the Company operates; the reduction in revenues from government programs; the relatively thin level of backlog at any given time; the mix of sales among the Company's divisions; deferrals of customer orders in anticipation of new products, applications or product enhancements; the Asian economic crisis and instability; currency fluctuations and restrictions; and general economic and market conditions. Moreover, the Company's sales in any quarter typically consist of a relatively small number of large customer orders, and the timing of a small number of orders can impact quarter to quarter results. The loss of or a substantial reduction in orders from any significant customer could have a material adverse effect on the Company's business, financial condition and results of operations. The Company's revenue growth in prior periods may not be sustainable and may not be indicative of future operating results, and there can be no assurance that the Company will continue to achieve profitability on a quarterly or annual basis in the future. Due to all of the foregoing factors and other risks discussed below, it is possible that in some future period the Company's operating results may be below the expectations of analysts and investors. In such event, the market price of the Company's securities would probably be materially and adversely affected.

Uncertainty of Incubator Strategy. The Company has initiated a strategy to nurture its business divisions with the goal of conducting additional initial public offerings. Such a strategy requires a significant investment, the benefits of which may not be realized for a long time period, if at all. The Company's ability to complete an initial public offering of any of its divisions or subsidiaries will depend upon numerous factors, including, without limitation, the overall performance of such division, its growth potential, management team, market size, customer base, product line and results of operations, as well as general economic and market conditions. There can be no assurance that the Company will be able to complete a successful initial public offering of any of its divisions in the near future, if at all.

Rapid Technological Change; Effect of New Product Introduction and Uncertain Market Acceptance. The markets served by the Company are characterized by 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. The Company's business requires substantial ongoing research and development efforts and expenditures, and its future success will depend on its ability to enhance its current products, reduce product costs and develop and introduce new products which incorporate the latest technological advancements in hardware, storage media, operating system software and applications software in response to evolving customer requirements. The Company's failure to anticipate or respond adequately to technological developments and changing customer requirements, the occurrence of significant delays in new product development or introduction or the failure of any new products to gain market acceptance could impair the Company's competitiveness and could materially and adversely affect the Company's business, financial condition and results of operations. There can be no assurance that the Company will be able to introduce new products or enhancements to existing products on a timely basis, if at all, or the effect to which such introductions will have on sales of existing products. To the extent new products are introduced, they may contain undetected design faults and software errors or "bugs" when first released by the Company that, despite testing by the Company, are discovered only after a product has been installed and used by customers. Although the Company has not experienced any material adverse effect resulting from any such faults or errors to date, there can be no assurance that faults or errors in the Company's existing products or in new products introduced by the Company will not cause delays in product introduction and shipments or require design modifications that could adversely affect the Company's competitive position and results of operations. The Company's success is also dependent in large part upon achieving broad market acceptance of

certain new products including its Roswell, Vortex, Digi Scan Pro, Vantage One and Lane Tracker products. There can be no assurance that any such products or enhancements thereto will be able to achieve broad market acceptance. Market acceptance of the Company's new products depends upon numerous factors, including the ability to resolve technical challenges in a timely and cost-effective manner, the perceived advantages over traditional products and the marketing capabilities of the Company's independent distributors and strategic partners. In addition, the Company anticipates that the manufacture of Lane Tracker will be

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outsourced to a single manufacturer. There can be no assurance that this manufacturer will be able to manufacture sufficient quantities in a timely manner or at a reasonable cost, either of which could materially and adversely affect the Company's ability to launch or gain market acceptance of Lane Tracker.

Risks Associated with International Sales; Effect of Asian Economical Crisis. International product sales represented approximately 30%, 36% and 34% of the Company's total net sales and contract revenues for the fiscal years ended March 31, 1996, 1997 and 1998, respectively. The Company's products sold by its telecommunications operations are sold principally to LGIC of Korea. As a result of economic instability in Asia, particularly Korea, the Company's sales in this region declined during the fourth quarter of fiscal 1998 and could be further impacted by the currency devaluations and restrictions, and related economic problems in this region and abroad in general. The Company believes that international sales will continue to represent a significant portion of its revenues, and that continued growth and profitability may require further expansion of its international operations. The Company's international sales are currently denominated primarily in U.S. dollars, and an increase in the relative value of the dollar could make the Company's products more expensive and, therefore, potentially less price competitive in international markets. Additional risks inherent in international business activities generally include unexpected changes in regulatory requirements, tariffs and other trade barriers, longer accounts receivable payment cycles, difficulties in managing and staffing international operations, potentially adverse tax consequences including restrictions on the repatriation of earnings, the burdens of compliance with a wide variety of foreign laws, currency fluctuations and political and economical instability. The Company does not engage in any transactions as a hedge against risks of loss due to foreign currency fluctuations. There can be no assurance that such factors will not have a material adverse effect on the Company's future international sales and, consequently, the Company's business, operating results and financial condition. Furthermore, as the Company increases its international sales, its 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.

Management of Growth; Risks Related to Possible Acquisitions. Over the past year, the Company has significantly expanded its operations and has completed the acquisition of certain assets of the Transportation Systems business of Rockwell International as well as Intelligent Controls, Inc., and the Company has entered into a letter of intent to acquire Meyer Mohaddes & Associates, Inc. and intends to continue to pursue an acquisition strategy. This period of rapid growth and expansion will continue to place a significant strain on the Company's resources. To accommodate this growth, the Company will be required to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of its accounting and other internal management systems, all of which require substantial management effort. There can be no assurance that the such efforts can be accomplished successfully or that the Company will be able to identify, acquire, profitably manage or successfully integrate any such business into the Company without incurring substantial delays or other operational or financial problems. Moreover, competitors of the Company 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. Acquisitions may require significant capital infusions and, in general, involve a number of special risks, including the diversion of management's attention, the failure to retain or successfully integrate key acquired personnel, the challenge of operating diverse business divisions, increased costs to improve managerial, operational, financial and administrative systems, legal liabilities and increased interest expense and amortization of acquired intangible assets, any of which could materially and adversely affect the Company's business, financial condition and results of operations.

Reliance of Government Contracts and Subcontractors; Risks Related to Fixed Price Contracts. Substantially all of net sales by ITS and a portion of the net sales by Communications for the year ended March 31, 1998 and the three months ended June 30, 1998 were derived from contracts with governmental agencies, either as a general contractor, subcontractor or supplier. Government business is, in general, subject to special risks and challenges such as long purchase cycles, competitive bidding and qualification requirements, performance bond requirements, delays in funding, budgetary constraints, milestone requirements and liquidated damage provisions for failure to meet contract milestones. In addition, a large number of the Company's government contracts are fixed price contracts, pursuant to which the Company benefits from cost savings, but is unable to recover for any cost overruns. Such fixed price contracts require the Company 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 the Company's ability to estimate such costs accurately and complete the project on a timely basis. In the event the Company's costs on such projects exceed the fixed contractual cost, the Company will be required to bear the excess costs. Such costs could exceed project profit margins or even revenues, and accordingly, could have a material adverse effect on the Company's financial condition and results of operations. Moreover, certain of the Company's government contracts are subject to termination or renegotiation at the convenience of the government, which could result in a large decline in net sales in any given quarter. The Company's inability to address any of the foregoing concerns or the loss or renegotiation of any material government contract could have a material adverse effect on the Company's business, financial condition and results of operations.

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Competition. The Company competes in each of its markets with numerous other companies, many of which have far greater name recognition and financial, technological, marketing and customer service resources than the Company and may be able to respond more quickly to new or emerging technologies and changes in customer requirements, or devote greater resources to the development, promotion, sale and support of their products than the Company. The Company believes the principal competitive factors in the markets in which the Company participates are product quality and performance, price, reliability, upgradeability, service and technical support. There can be no assurance that the Company will be able to compete effectively in the markets for its products. Increased competition is likely to result in price reductions, reduced gross margins and loss of market share, any of which could have a material adverse affect upon the Company's business, operating results and financial condition.

Dependence on Key Personnel. The Company's future performance depends to a significant extent on its senior management and other key employees, in particular Joel Slutzky and Gregory A. Miner, the Company's Chief Executive Officer and Chief Operating Officer, respectively. The loss of the services of either of Messrs. Slutzky or Miner, or certain other key employees would have a material adverse effect on the Company's development and marketing efforts. The Company's future success will also depend in large part upon its ability to attract, retain and motivate highly skilled employees. Competition for employees, particularly development engineers, is intense, and there can be no assurance that the Company will be able to continue to attract and retain sufficient numbers of such highly skilled employees. The Company's inability to attract and retain additional key employees or the loss of one or more of its current key employees could have a material adverse effect upon the Company's business, financial condition and results of operations.

Dependence on Proprietary Technology; Risks of Infringement. The Company's ability to compete effectively depends in part on its ability to develop and maintain proprietary aspects of its technology which the Company attempts to protect with a combination of patent, copyright, trademark and trade secret laws, employee and third party nondisclosure agreements and similar means. Such rights may not preclude competitors from developing substantially equivalent or superior products to the Company's products. In addition, the laws of some foreign countries do not protect the Company's proprietary rights as fully as do the laws of the United States. There can be no assurance that the Company's means of protecting its proprietary rights in the United States or abroad will be adequate, that future patents will be issued, or that competitors will not independently develop technologies that are similar or superior to the Company's technology, duplicate the Company's technology, or design around any patent of the Company. Moreover, litigation has been necessary in the past and may be necessary in the future to enforce the Company's intellectual property rights,

to determine the validity and scope of the proprietary rights of others, or to defend the Company against claims of infringement or invalidity by others. An adverse outcome in such litigation or similar proceedings could subject the Company to significant liabilities to third parties, require disputed rights to be licensed from others or require the Company to cease marketing or using certain products, any of which could have a material adverse effect on the Company's business, financial condition and results of operations. If the Company is required to obtain licenses under patents or proprietary rights of others, there can be no assurance that any required licenses would be made available on terms acceptable to the Company, if at all. 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 have a material adverse effect on the Company's results of operations.

Volatility of Stock Price. The trading price of the Company's Common Stock has been in the past and could be in the future subject to wide fluctuations in response to quarterly variations in operating results, shortages announced by suppliers, announcements of technological innovations or new products, changes in pending litigation, applications or product enhancements by the Company or its competitors, changes in financial estimates by securities analysts and other events or factors. In addition, the stock market has experienced volatility which has particularly affected the market prices of equity securities of many high technology companies and which often has been unrelated to the operating performance of such companies. These broad market fluctuations may adversely affect the market price of the Company's Common Stock.

Concentration of Ownership. As of August 31, 1998, the Company's officers and directors beneficially owned a majority of the total combined voting power of the outstanding shares of Class A Common Stock and Class B Common Stock. As a result of their stock ownership, management will be able to significantly influence the election of the Company's directors and the outcome of corporate actions requiring stockholder approval, such as mergers and acquisitions, regardless of how other stockholders of the Company may vote. This concentration of voting control may have a significant effect in delaying, deferring or preventing a change in management or change in control of the Company and may adversely affect the voting or other rights of other holders of Common Stock.

Anti-Takeover Effects of Charter Provisions, Bylaws, Stock Structure and Stockholder Rights Plan. The Company has two classes of Common Stock which are substantially identical other than with respect to voting power. The Company's Class A Common Stock entitles the holder to 1/10th vote per share and Class B Common Stock entitles the holder to one vote per share, with concentration of ownership of the Class B Common Stock in the Company's officers and directors and their affiliates. In addition, the Company's Board of Directors is elected

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annually on a split vote basis, with the holders of Class A Common Stock currently being entitled to elect three of the directors and holders of the Class B Common Stock currently being entitled to elect the remaining six directors. These provisions could have the effect of discouraging a proxy contest or making it more difficult for a third party acquiring a substantial block of the Company's Common Stock to effect a change in management and control of the Company. Such provisions also could limit the price that investors might be willing to pay in the future for shares of the Company's Common Stock. The Board of Directors of the Company is authorized to issue, without stockholder approval, up to 2,000,000 shares of Preferred Stock with voting, conversion and other rights and preferences, as well as additional shares of Class B Common Stock, which could adversely affect the voting power or other rights of the holders of Class A Common Stock. Although the Company has no current plans to issue any shares of Preferred Stock or additional shares of Class B Common Stock, the future issuance of Preferred Stock or Class B Common Stock or of rights to purchase Preferred Stock or Class B Common Stock could be used to discourage an unsolicited acquisition proposal. In March 1998, the Company's Board of Directors adopted a stockholder rights plan, pursuant to which the Company declared a dividend of preferred stock purchase rights to the Company's stockholders. Each right entitles the holder to purchase one one-thousandth of a share of junior participating Preferred Stock of the Company at an exercise price of \$60. While the rights generally are only exercisable if a person or group acquires 15% or more of the Company's stock, the exercise of the rights could cause substantial dilution to a particular acquiror. Although the purpose of the Stockholder Rights Plans is to provide an incentive to potential acquirors to deal directly with the Company's Board of Directors, the existence

of the stockholder rights plan could be considered to delay or make a merger, tender offer or proxy contest more difficult.

Year 2000 Compliance. Many currently installed computer systems and software products are coded to accept only two digit entries in the date code field. These date code fields will need to accept four digit entries to distinguish 21st century dates from 20th century dates. As a result, in less than three years, computer systems and/or software used by many companies may need to be upgraded to comply with such "Year 2000" requirements. Significant uncertainty exists in the hardware and software industry concerning the potential effects associated with such compliance. Although the Company's core products are designed to be Year 2000 compliant, there can be no assurance that such products contain all necessary date code changes. The Company is in the process of updating its existing information systems to become Year 2000 compliant. The Company has established an internal task force to evaluate its current status concerning the Company's state of readiness for the Year 2000. The Company believes the most significant impact of the Year 2000 issues will be the readiness of the Company's suppliers, distributors, customers and lenders with whom the Company must interact. This evaluation is still at an early stage, and the Company does not yet have any contingency plans to address its inability to remedy these issues. Despite the Company's efforts to address the Year 2000 impact, the Company has not fully identified such impact and may not be able to update its systems and products or resolve the other Year 2000 issues without disrupting its business or without incurring significant expense. The failure to address these issues on a timely basis or at all could have a material adverse effect on the Company's business, financial condition and results of operations.

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USE OF PROCEEDS

The Company will not receive any of the proceeds from the sale of the Shares. All proceeds from the sale of the Shares will be for the account of the Selling Stockholders, as described below. See "Selling Stockholders" and "Plan of Distribution" described below.

SELLING STOCKHOLDERS

The following table sets forth the number of shares of Class A Common Stock beneficially owned by each of the Selling Stockholders as of September 17, 1998. Except as indicated, no Selling Stockholder has had a material relationship with the Company within the past three years other than as a result of the ownership of the Shares. Because (i) the Selling Stockholders may offer all or some of the Shares which they hold pursuant to the offering contemplated hereby, and (ii) there are currently no agreements, arrangements or understandings with respect to the sale of any of the Shares, no estimate can be given as to the amount of Shares that will be held by the Selling Stockholders after completion of this offering. See "Plan of the Shares."

The Shares being offered pursuant to this Prospectus by the Selling Stockholders were acquired from the Company in connection with its acquisition of IMIS. In accordance with the Agreement, the Company agreed to effect a shelf registration (of which this Prospectus is a part) of all Shares in order to permit the Selling Stockholders to effect sales of such Shares from time to time in the market or in privately-negotiated transactions. The Company will prepare and file such amendments and supplements to the Registration Statement as may be necessary in accordance with the rules and regulations of the Securities Act to keep it effective until the earlier to occur of the following events: (i) twelve (12) months have elapsed since the consummation of the IMIS Acquisition; (ii) all Shares have been sold pursuant to the Registration Statement; or (iii) all Shares held by each Selling Stockholder can be sold by such stockholder in a three month period pursuant to Rule 144 under the Securities Act. The Company agreed to bear all expenses other than fees and expenses of counsel for the Selling Stockholders and underwriting discounts and commissions and brokerage commissions and fees.

The Shares may be offered from time to time by the Selling Stockholders named below:

Shares Beneficially Owned Prior to	Percentage of	Number of Shares Being
---------------------------------------	------------------	---------------------------

Selling Stockholder (1)	Offering	Class (2)	Offered
Anthony John Taylor	74,290	1.2%	74,290
David John Lane	74,290	1.2	74,290
Joanne Taylor	12,317	*	12,317
Hillary Lane	12,317	*	12,317
Total	173,214	2.8%	173,214

* Less than one percent.

- (1) This Registration Statement shall also cover any additional shares of Class A Common Stock which become issuable in connection with the Shares registered for sale hereby 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 the Company's outstanding shares of Common Stock.
- (2) Based on 6,208,762 shares of Class A Common Stock outstanding as of September 17, 1998.

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PLAN OF DISTRIBUTION

The Company is registering the Shares on behalf of the Selling Stockholders. As used herein, "Selling Stockholders" includes donees and pledgees selling shares received from a named Selling Stockholder after the date of this Prospectus. All costs, expenses and fees in connection with the registration of the Shares offered hereby (other than certain fees and expenses of a Selling Stockholder's counsel) will be borne by the Company. Brokerage commissions and similar selling expenses, if any, attributable to the sale of Shares will be borne by the Selling Stockholders. Sales of Shares may be effected by Selling Stockholders from time to time in one or more types of transactions (which may include block transactions) on the Nasdaq National Market, in negotiated transactions, through put or call transactions relating to the Shares, through short sales of Shares, or a combination of such methods of sale, at market prices prevailing at the time of sale, or at negotiated prices. While such transactions may or may not involve brokers or dealers, the Selling Stockholders have engaged Cruttenden Roth Incorporated who will act as the initial distributing agent for the Shares. Cruttenden has represented that it will not receive any compensation in excess of usual and customary sellers' commissions in connection with the sale and distribution of the Shares. The Selling Stockholders have authorized Cruttenden to sell all of the Shares in such amounts and at such prices as Cruttenden, in its sole discretion, deems appropriate to preserve an orderly market in the Company's Class A Common Stock. The Company has not entered into any contractual arrangement with Cruttenden concerning this matter; however, the Selling Stockholders have represented to the Company that they would effect such sales through Cruttenden. In effecting sales, Cruttenden or any other brokers or dealers engaged by the Selling Stockholders may arrange for other brokers or dealers to participate. The Selling Stockholders have advised the Company that they have not entered into any other agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of the Shares.

The Selling Stockholders may effect such transactions by selling Shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. Such broker-dealers may receive compensation in the form of discounts, concessions, or commissions from the Selling Stockholders and/or the purchasers of Shares for whom such broker-dealers may act as agents or to whom they sell as principal, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). Upon the Company being notified by a Selling Stockholder that any other 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, a supplement to this Prospectus will be filed, if required, pursuant to Rule 424(b) under the Act, disclosing (i) the name of each such Selling Stockholder and of the participating broker-dealer(s), (ii) the number of Shares involved, (iii) the price at which such Shares were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this Prospectus and (vi) other facts material to the transaction. In addition, upon the Company being notified by a Selling Stockholder that a donee or pledgee

intends to sell more than 500 shares, a supplement to this Prospectus will be filed.

The Selling Stockholders and any broker-dealers that act in connection with the sale of Shares might be deemed to be "underwriters" within the meaning of Section 2(11) of the Act, and any commissions received by such broker-dealers and any profit on the resale of the Shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Act. The Company has agreed to indemnify each Selling Stockholder against certain liabilities, including liabilities arising under the Act. The Selling Stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the Shares against certain liabilities, including liabilities arising under the Act.

Because Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Act, the Selling Stockholders will be subject to the prospectus delivery requirements of the Act. The Company has informed the Selling Stockholders that the anti-manipulative provisions of Regulation M promulgated under the Exchange Act may apply to their sales in the market.

The Selling Stockholders also may resell all or a portion of the Shares in open market transactions in reliance upon Rule 144 under the Act, provided they meet the criteria and conform to the requirements of such Rule.

In order to comply with the securities laws of certain states, if applicable, the Shares may be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the Shares may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements 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 the Common Stock of the

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Company for a period of two business days prior to the commencement of such distribution. In addition and without limiting the foregoing, each Selling Stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, Rules 10b-6 and 10b-7, which provisions may limit the timing of purchases and sales of shares of the Company's Common Stock by the Selling Stockholders.

The Shares were originally issued to the Selling Stockholders in connection with the Company's acquisition of IMIS in September 1998 pursuant to an exemption from the registration requirements of the Securities Act. The Company has agreed to register the Shares under the Securities Act and to indemnify and hold certain Selling Stockholders harmless against certain liabilities under the Securities Act that could arise in connection with the sale by the Selling Stockholders of the Shares.

There can be no assurance that the Selling Stockholders will sell all or any of the shares of the Class A Common Stock offered hereunder.

INDEMNIFICATION

Under Section 145 of the Delaware General Corporation Law, the Company can indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act. The Company's Bylaws provide that the Company will indemnify its directors and officers to the fullest extent permitted by law and require the Company to advance litigation expenses upon receipt by the Company 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.

The Company's Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to the Company 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 the Company 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.

The Company has entered into agreements to indemnify its directors 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 the Company's directors and certain of its officers for certain expenses (including 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 the Company, on account of services as a director or officer of the Company, or as a director or officer of any other company or enterprise to which the person provides services at the request of the Company.

LEGAL MATTERS

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

EXPERTS

The consolidated financial statements of Odetics, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended March 31, 1998, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

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ODETICS, INC.

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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 the Company with respect to the sale and distribution of the securities being registered. All of the amounts shown are estimates except the Securities and Exchange Commission registration fee and the Nasdaq National Market listing fee.

SEC Registration Fee.....	\$ 270
Nasdaq National Market additional listing fee.....	3,464
Printing Expenses.....	1,000
Legal Fees and Expenses.....	15,000
Accounting Fees and Expenses.....	3,000
Miscellaneous.....	5,000

Total.....	\$24,270
	=====

Item 15. Indemnification of Directors and Officers

Under Section 145 of the Delaware General Corporation Law, the Company can indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act. The Company's Bylaws provide that the Company will indemnify its directors and officers to the fullest extent permitted by law and require the Company to advance litigation expenses upon receipt by the Company 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.

The Company's Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to the Company 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 the Company 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.

The Company has entered into agreements to indemnify its directors 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 the Company's directors and certain of its officers for certain expenses (including 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 the Company, on account of services as a director or officer of the Company, or as a director or officer of any other company or enterprise to which the person provides services at the request of the Company.

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Item 16. Exhibits

Exhibit
Number

- 5.1 Opinion of Brobeck, Phleger & Harrison LLP.
- 23.1 Consent of Ernst & Young LLP, Independent Auditors.
- 23.2 Consent of Brobeck, Phleger & Harrison LLP (included in Exhibit 5.1).

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 of 1933, as amended;

(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 Commission pursuant to 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

(ii) 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 (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Company pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, 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 the Company's Annual Report pursuant to Section 13(a) or 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 herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(4) To file a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding)

is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the 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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Anaheim, State of California, on the 18th day of September, 1998.

ODETICS, INC.

By /s/ JOEL SLUTZKY

Joel Slutzky,
Chairman of the Board and Chief
Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Joel Slutzky and Gregory A. Miner, jointly and severally, as attorneys-in-fact, each with the power of substitution, for him or her 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 or she 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/ JOEL SLUTZKY ----- Joel Slutzky	Director and Chief Executive Officer (Principal Executive Officer)	September 18, 1998
/s/ GREGORY A. MINER ----- Gregory A. Miner	Director, Chief Operating Officer and Chief Financial Officer (Principal Financial Officer)	September 18, 1998
/s/ KEVIN C. DALY ----- Kevin C. Daly	Director	September 18, 1998
/s/ CRANDALL GUDMUNDSON ----- Crandall Gudmundson	Director	September 18, 1998
/s/ RALPH R. MICKELSON ----- Ralph R. Mickelson	Director	September 18, 1998
/s/ JERRY F. MUENCH ----- Jerry F. Muench	Director	September 18, 1998
/s/ JOHN W. SEAZHOLTZ ----- John W. Seazholtz	Director	September 18, 1998
/s/ LEO WEXLER ----- Leo Wexler	Director	September 18, 1998

/s/ PAUL E. WRIGHT

Director

September 18, 1998

Paul E. Wright

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EXHIBIT INDEX

Exhibit
Number
- -----

Exhibit

5.1	Opinion of Brobeck, Phleger & Harrison LLP.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
23.2	Consent of Brobeck, Phleger & Harrison LLP (included in Exhibit 5.1).
24.1	Power of Attorney (see page II-4).

EXHIBIT 5.1

OPINION OF BROBECK, PHLEGER & HARRISON LLP

September 17, 1998

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

Re: Odetics, Inc. Registration Statement on Form S-3 for Resale of 173,214
Shares of Class A Common Stock

Ladies and Gentlemen:

We have acted as counsel to Odetics, Inc. a Delaware corporation (the "Company"), in connection with the registration for resale of up to 173,214 shares of the Company's Class A Common Stock (the "Shares") pursuant to the Company's 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 the Company's charter documents and the corporate proceedings taken by the Company 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, fully paid and nonassessable.

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 the Company or the Shares.

Very truly yours,

Brobeck, Phleger & Harrison LLP

EXHIBIT 5.1

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statements (Form S-3) and related Prospectus of Odetics, Inc. for the registration of 173,214 shares of its Class A common stock and to the incorporation by reference therein of our report dated May 4, 1998 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, 1998, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Orange County, California
September 17, 1998

EXHIBIT 23.1