

As filed with the Securities and Exchange Commission on September 30, 1999

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 | (I.R.S. Employer |
| incorporation) | 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.
Marrie Stone, 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. [X]

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

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under
the Securities Act, 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) | 53,343 | \$10.5315 | \$561,781.80 | \$157 |

- (1) Estimate based upon the average of the high and low sales prices of the Registrant's Class A Common Stock on September 28, 1999, as reported by the Nasdaq National Market, pursuant to Rule 457(c) promulgated under the Securities Act of 1933, as amended.

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.

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.

PROSPECTUS

(Subject to completion, dated September ___, 1999)

53,343 Shares
ODETICS, INC.
Class A Common Stock

This prospectus relates to the public offering, which is not being underwritten, of 53,343 shares of our Class A common stock which is held by some of our current stockholders. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market price for the 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. 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 three directors. The holders of the Class B common stock 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 is quoted on the Nasdaq National Market under the symbol "ODETA." On September 28, 1999, the last reported sale price for the Class A common stock was \$10.25 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 September ___, 1999.

ODETICS

Odetics is a collection of high technology companies and operating divisions, each with its own marketplace, customers and products. These operations share a common corporate overhead for support for facilities, human resources, benefits, accounting and finance, and some executive management services. We provide communications equipment and services for the television broadcast, video security, telecommunications and intelligent traffic systems markets. We currently define our business segments as video products, telecom products and ITS. Our video products segment includes our Broadcast division and our Gyyr subsidiary. Our telecom products segment includes our Communications division and our Mariner Networks subsidiary. Our ITS segment consists of our Odetics ITS subsidiary.

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

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RISK FACTORS

Before purchasing the shares offered by this prospectus, you should carefully consider the risks described below, in addition to the other information presented in this prospectus or incorporated by reference into this prospectus. If any of the following risks actually occur, they could seriously harm our business, financial condition or results of operations. In such case, the trading price of our Class A common stock could decline and you may lose all or part of your investment.

OUR QUARTERLY OPERATING RESULTS FLUCTUATE AS A RESULT OF MANY FACTORS. Our quarterly operating results have fluctuated and are likely to continue to fluctuate due to a number of factors, many of which are not within our control. Because of the factors listed below and other risks discussed in this report, our future operating results could be below the expectations of securities analysts and/or investors. If that happens, the trading price of our common stock could be adversely affected.

Factors that could affect our revenues include the following:

- . our significant investment in research and development for our subsidiaries and divisions;
- . our ability to develop, introduce, market and gain market acceptance of new products applications and product enhancements in a timely manner;
- . the introduction of new products by competitors and technological change in our target markets;
- . the availability of components used in the manufacture of our products;

- . our ability to control costs;
- . changes in our pricing policies and the pricing policies by our suppliers and competitors, 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;
- . our relatively small level of backlog at any given time;
- . the mix of sales among our business units; and
- . the Asian economic crisis and instability.

In addition, our sales in any quarter typically consist of a relatively small number of large customer orders. As a result, the timing of a small number of orders can 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.

WE HAVE EXPERIENCED SUBSTANTIAL LOSSES AND EXPECT FUTURE LOSSES. We incurred net losses of \$6.6 million for the three months ended June 30, 1999 and net losses of \$20.1 million for the year ended March 31, 1999. We may not be able to achieve profitability on a quarterly or annual basis in the future. Recent revenue growth also may not be sustainable and may not be indicative of future operating results. Most of our expenses are fixed in advance, and we

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generally are unable to reduce our expenses significantly in the short term to compensate for any unexpected delay or decrease in anticipated revenues. In addition, in order to implement our incubator strategy successfully, we expect to continue to make significant investments in each of our business units. As a result, we may continue to experience losses that could cause the market price of our common stock to decline.

OUR INCUBATOR STRATEGY IS EXPENSIVE AND MAY NOT BE SUCCESSFUL. We have initiated a business strategy called our incubator strategy, which is expensive and highly risky. The goal of this strategy is to nurture and develop companies that can be spun-off to our stockholders. This strategy has in the past required us to make significant investments in our business units, both for research and development, and also to develop a separate infrastructure for each of our business units, sufficient to allow each unit to function as an independent public company. We expect to continue to invest heavily in the development of our business units with the goal of conducting additional public offerings. We may not recognize the benefits of this investment for a significant period of time, if at all. Our ability to complete an initial public offering of any of our business units and spin-off our interest 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 the business unit;
- . our ability to assemble and retain a broad, 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 transactions and our ability to obtain favorable determination letters from the Internal Revenue Service; and
- . general economic and market conditions.

We may not be able to complete a successful initial public offering or spin-off of any of our business units in the near future, or at all. Even if we

do complete additional public offerings, we may decide not to spin-off a particular business unit, or to delay the spin-off until a later date.

WE MUST KEEP PACE WITH RAPID TECHNOLOGICAL CHANGE TO REMAIN COMPETITIVE. 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.

We believe that we must continue to make substantial investments to support ongoing research and development in order to remain competitive. In particular, we will need to modify certain of our products to accommodate the anticipated deployment of digital television and the

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corresponding phase-out of analog transmissions. We will also have 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 recent shift towards providing more software solutions may create additional challenges for us, particularly in our Broadcast division. 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.

OUR FUTURE SUCCESS DEPENDS ON THE SUCCESSFUL DEVELOPMENT AND MARKET ACCEPTANCE OF NEW PRODUCTS.

We believe our revenue growth and future operating results will depend on our ability to complete development of new products and enhancements, 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 our certain of our existing products.

Our future success will also depend in part on the success of several recently introduced products including:

- . Roswell, our automated facility management system for broadcast television stations;
- . Bowser, our visual asset manager;
- . Vortex, our high performance dome product;
- . Digi Scan Pro, our advanced digital multiplexer;
- . Vantage One, our single camera traffic detection system;
- . Auto Vue, our lane departure warning system; and
- . Dexter, our networking access device.

Market acceptance of our new products depends upon many factors, including our ability to resolve technical challenges in a timely and cost-effective manner, 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. We have experienced delays in the past in the introduction of new products, particularly with our Roswell system. 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 our 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.

We currently anticipate that we will outsource the manufacture of Auto Vue 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 Auto Vue.

WE MAY NEED ADDITIONAL CAPITAL IN THE FUTURE AND MAY NOT BE ABLE TO SECURE ADEQUATE FUNDS ON TERMS ACCEPTABLE TO US. We recently raised approximately \$10.0 million

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in two private placements, approximately \$8.0 million of which was raised in December 1998. Approximately \$2.0 million was raised from the sale of Class A common stock to certain of our officers and directors in March 1999, following stockholder approval of this offering. We may need to raise additional capital in the near future, either through additional bank borrowings or other debt or equity financings. Our capital requirements will depend on many factors, including:

- . market acceptance of our products;
- . increased research and development funding, and required investments in our business units;
- . increased sales and marketing expenses;
- . potential acquisitions of businesses and product lines; and
- . additional working capital needs.

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 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 develop or enhance our products, expand our sales and marketing programs, take advantage of future opportunities or respond to competitive pressures.

WE HAVE SIGNIFICANT INTERNATIONAL SALES AND ARE SUBJECT TO RISKS ASSOCIATED WITH OPERATING IN INTERNATIONAL MARKETS. International product sales represented approximately 27% of our total net sales and contract revenues for fiscal year ended March 31, 1999 and approximately 34% for the fiscal year ended March 31, 1998. 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. Accordingly, we may be subject to many inherent risks related to international business operations, which could adversely affect our business, financial condition and results of operations. These risks include:

- . unexpected changes in regulatory requirements, tariffs and other trade barriers;
- . longer accounts receivable payment cycles;
- . seasonal fluctuations resulting from lower sales that typically occur during the summer months in Europe and other parts of the world;
- . difficulties in managing and staffing international operations;
- . potentially adverse tax consequences;
- . the burdens of compliance with a wide variety of foreign laws;
- . reduced protection for intellectual property rights in some

countries; and

. political and economic instability.

Our international sales are currently denominated primarily in U.S. dollars. As a result, an increase in the relative value of the dollar could make our products more expensive and

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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 or restrictions.

Any of these factors may adversely effect our future international sales and, consequently, on our business, financial condition and operating results.

Our operating results have been adversely affected by the Asian economic crisis. Our telecommunications products are sold principally to LGIC of Korea. As a result of economic instability in Asia, particularly in Korea, our sales in this region declined over 70% in the past fiscal year and may continue to decline in the future. It is possible that these sales could be further impacted by the currency devaluations and related economic problems in this region.

WE NEED TO MANAGE GROWTH AND THE INTEGRATION OF OUR ACQUISITIONS. Over the past two years, we have significantly 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. A key element of our business strategy involves expansion through the acquisition of complementary businesses, products and technologies. Our failure to manage growth and integrate our acquisitions successfully could be costly and could adversely affect our business, financial condition and results of operations.

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;
- . 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, customers or suppliers as a result of changes in management; and
- . increased interest expense and amortization of acquired intangible assets.

To accommodate our recent growth and successfully integrate our acquisitions, we anticipate that we will be required to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of our accounting and other internal management systems. We may not be able to successfully integrate such systems, procedures and controls.

WE DEPEND ON GOVERNMENT CONTRACTS AND SUBCONTRACTS AND FACE ADDITIONAL RISKS RELATED TO FIXED PRICE CONTRACTS. Substantially all of the sales by our subsidiary, Odetics ITS, Inc., and a portion of our sales by our Communications division were derived from contracts with governmental agencies, either as a general contractor, subcontractor or supplier. Government contracts represented approximately 16% of our net sales and contract revenues for the year ended March 31, 1999 and approximately 21% for the three months ended June 30, 1999. We expect revenue from government contracts will continue to increase in the

near future. Government business is, in general, subject to special risks and challenges, including:

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- . long purchase cycles;
- . competitive bidding and qualification requirements;
- . performance bond requirements;
- . delays in funding, budgetary constraints and cut-backs;
- . 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 within our budgeted costs and 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 would 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 contract revenue 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 MARKETS IN WHICH WE OPERATE ARE HIGHLY COMPETITIVE AND HAVE MANY MORE ESTABLISHED COMPETITORS. 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 CANNOT BE CERTAIN OF OUR ABILITY TO ATTRACT AND RETAIN KEY PERSONNEL AND WE DO NOT HAVE EMPLOYMENT AGREEMENTS WITH ANY KEY PERSONNEL. Our inability to attract and retain additional key employees or the loss of one or more of our current key employees could adversely affect upon our business, financial condition and results of operations. 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 Chief Executive Officer and Chairman of the Board, and Gregory A. Miner, our Chief Operating Officer and Chief Financial Officer. We do not have any employment contracts with any of our officers or key employees. The loss of any of these persons would seriously harm our development and marketing efforts, and would adversely affect our business. 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.

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WE MAY NOT BE ABLE TO ADEQUATELY PROTECT OR ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS. 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.

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. Any of these results could adversely affect on 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.

THE TRADING PRICE OF OUR COMMON STOCK IS VOLATILE. The trading price of our common stock has been subject to wide fluctuations in the past, decreasing from \$20.375 in October 1997 to \$4.25 in October 1998. We may not be able to increase or sustain the current market price of our common stock in the future. 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;
- . shortages announced by suppliers
- . announcements of technological innovations or new products;
- . acquisitions or businesses, products or technologies;
- . changes in pending litigation;
- . our ability to spin-off any business units;
- . applications or product enhancements by us or by our competitors;
and
- . changes in financial estimates 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.

WE ARE CONTROLLED BY CERTAIN OF OUR OFFICERS AND DIRECTORS. As of June 30, 1999, our officers and directors beneficially owned approximately 29% of the total combined voting power of the outstanding shares of our Class A common stock and Class B common stock. As a result

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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 EFFECT THE PRICE OF OUR COMMON STOCK. 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. In addition, holders of the Class B common stock are presently entitled to elect six of our nine directors. 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 Odetics 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 Odetics. The mere existence of the stockholder rights plan often delays or makes 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 systems and software products will need to accept four digit entries to distinguish 21st century dates from 20th century dates. As a result, computer systems and/or software used by many companies may need to be upgraded to comply with such Year 2000 requirements or risk system failure or miscalculations causing disruptions of normal business activities. Although our core products are designed to be Year 2000 compliant, it is difficult to ensure that our products contain all necessary date code changes. We are in the process of updating our existing information systems to become Year 2000 compliant. We have established an internal task force to evaluate our current status and state of readiness for the Year 2000. We believe the most significant impact of the Year 2000 issues will be the readiness of our suppliers, distributors, customers and lenders with whom we must interact. This evaluation is still at an early stage. We do not yet have any contingency plans to address our inability to remedy these issues and we may not have fully identified the Year 2000 impact. As such, we may not be able to update our systems and products or resolve the other Year 2000 issues without disrupting our business or without incurring significant expense. Our failure to address these issues on a timely basis or at all could result in lost revenues, increased operating costs, the loss of customers and other business interruptions, any of which could have a material adverse effect on our business, financial condition and results of operations.

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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 us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business operations

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file 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>.

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. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended. This prospectus is part of a registration statement we filed with the SEC (Registration No. 333-_____). The documents we incorporate by reference are:

1. Our Annual Report on Form 10-K, as amended, for the fiscal year ended March 31, 1999;
2. Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1999;
3. Our definitive proxy statement filed with the SEC on July 29, 1999 in connection with our 1999 annual meeting of stockholders;
4. Our Current Report on Form 8-K filed with the SEC on July 8, 1999;
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 under Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating such; 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 under Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All reports and other documents we subsequently file 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 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. We will not provide copies of exhibits to such documents unless such exhibits are specifically incorporated by reference into such document. 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.

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FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements. 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. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates" and variations of these words or similar expressions are intended to identify 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, our actual results could differ materially from those expressed or forecasted in any forward-looking statements as a result of a variety of factors, including those set forth in "Risk Factors" below and elsewhere in, or incorporated by reference into, this prospectus. We undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

USE OF PROCEEDS

The selling stockholders will receive all of the net proceeds from the sale of the Class A common stock offered by this prospectus. Accordingly, we will not receive any proceeds from sales of these shares.

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SELLING STOCKHOLDERS

The following table sets forth the number of shares owned by each of the selling stockholders. All information contained in the table below is based upon their beneficial ownership as of August 31, 1999. [Need to update to reflect MMA sales in 1999] We are not able to estimate the number of shares that will be held by the selling stockholders after completion of this offering because the selling stockholders may offer all or some of the shares and because there currently are no agreements, arrangements or understandings with respect to the sale of any of the shares. The following table assumes that all of the shares being registered will be sold. The selling stockholders are not making any representation that any shares covered by prospectus will or will not be offered for sale. The selling stockholders reserve the right to accept or reject, in whole or in part, any proposed sale of shares. The percentage calculations in the following table are based upon 8,017,030 shares of our Class A common stock which were outstanding as of September 27, 1999.

| Selling Stockholders | Shares Beneficially Owned Before Offering | | Number of Shares Being Offered(1) | Shares Beneficially Owned After Offering | |
|----------------------|--|------------|--|---|------------|
| | Number | Percentage | | Number | Percentage |
| Viggen Corporation | 27,603 | * | 27,603 | - | - |
| Abbas Mohaddes | 16,494 | * | 11,917 | 4,577 | * |
| Michael P. Meyer | 29,994 | * | 11,917 | 18,077 | * |
| Gary Hamrick | 1,251 | * | 1,251 | 0 | * |
| Viggen Davidian | 2,061 | * | 655 | 1,406 | * |
| Total | | * | 53,343 | | * |

* Represents beneficial ownership of less than 1% of the outstanding shares of Class A common stock.

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.

Abbas Mohaddes and Michael Meyer are currently the President and Vice President, respectively, of Meyer, Mohaddes Associates, Inc., a subsidiary of Odetics ITS, and Gary Hamrick and Viggen Davidian are presently employees of Odetics ITS. Except as indicated, we are not aware of any material relationship between our company and any selling stockholder within the past three years other than as a result of the ownership of the stockholder's shares. Viggen Corporation acquired the shares offered by this prospectus in connection with the Agreement of Purchase and Sale of Assets dated November 11, 1998, as amended, between our wholly-owned subsidiary, Odetics ITS, Inc., and Viggen Corporation. All of the other selling stockholders acquired the shares offered by this prospectus in connection with the Agreement and Plan of Reorganization among us, Odetics ITS, Inc., MMA Acquisition Corp., Meyer, Mohaddes Associates, Inc. and the selling stockholders dated October 16, 1998.

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Pursuant to these agreements, we agreed to effect a shelf registration (of which this prospectus is a part) of 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. We have agreed to prepare and file any amendments and supplements to the Registration Statement as may be necessary to keep the Registration Statement effective for at least six months following the effective date of this Registration Statement. We have also agreed to pay for all expenses of this offering other than fees and expenses of counsel for the selling stockholders and any underwriting discounts and commissions and brokerage commissions and fees.

PLAN OF DISTRIBUTION

We are registering all 53,343 shares on behalf of certain selling stockholders. Viggen Corporation acquired their shares in connection with our acquisition of Viggen Corporation pursuant to the Agreement of Purchase and Sale of Assets dated November 11, 1998, as amended, between our wholly-owned subsidiary, Odetics ITS, Inc., and Viggen Corporation. All of the other selling shareholders acquired their shares in connection with our acquisition of Meyer, Mohaddes Associates, Inc. pursuant to the Agreement and Plan of Reorganization dated October 16, 1998, as amended, among Odetics, Meyer, Mohaddes Associates, Inc. and the selling stockholders (other than Viggen Corporation). We will not receive any of the proceeds from this offering.

The selling stockholders named in this prospectus or pledgees, donees, transferees or other successors-in-interest selling shares received from a named selling stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus may sell 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 sale. The sales 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 the 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 the resales.

The selling stockholders 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 selling stockholders. The selling stockholders also may sell shares short and redeliver the shares to close out such short positions. The selling stockholders 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

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selling stockholders 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 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 of 1933, as amended, 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 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 has 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.

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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 stockholder will bear all commissions and discounts, if any, attributable to the sales of the shares. The selling stockholders may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of the shares against certain liabilities, including liabilities arising under the Securities Act. The selling stockholders have agreed to indemnify certain persons, including broker-dealers and agents, against certain liabilities in connection with the offering of the shares, including liabilities arising under the Securities Act.

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INDEMNIFICATION

Under Section 145 of the Delaware General Corporation Law, we can indemnify our directors and officers against liabilities they may incur in their capacities as officers and directors, including for liabilities under the Securities Act. Our bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by law. Our bylaws also require us to

advance litigation expenses upon our receipt 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.

Our certificate of incorporation provides that, under Delaware law, our directors will not be liable for monetary damages for breach of the directors' fiduciary duty of care to us and our 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 us or our 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.

We have also entered into agreements to indemnify our directors, the directors of certain of our subsidiaries and certain of our officers in addition to the indemnification provided for in the certificate of incorporation and bylaws. These agreements, among other things, indemnify our directors and certain of our 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 for us, on account of services as our director or officer, or as a director or officer of any other company or enterprise to which the person provides services at our request.

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/A for the year ended March 31, 1999, as set forth in their report, 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.

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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.

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ODETICS, INC.

53,343 Shares
of
Class A Common Stock

PROSPECTUS

September __, 1999

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 Securities and Exchange Commission registration fee and the Nasdaq National Market listing fee.

| | | |
|--|----|--------|
| SEC Registration Fee..... | \$ | 157 |
| Nasdaq National Market additional listing fee..... | | 2,515 |
| Printing Expenses | | 1,500 |
| Legal Fees and Expenses..... | | 5,000 |
| Accounting Fees and Expenses..... | | 3,000 |
| Miscellaneous..... | | 2,828 |
| | | ----- |
| Total..... | \$ | 15,000 |
| | | ===== |

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

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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

- 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.

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 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 information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by us 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 of 1933, as amended, 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.

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

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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this 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 30 day of September, 1999.

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 | Chairman of the Board and Chief Executive Officer (Principal Executive Officer) | September 30, 1999 |
| /s/ GREGORY S. MINER ----- Gregory A. Miner | Director, Chief Operating Officer and Chief Financial Officer (Principal Financial Officer) | September 30, 1999 |
| /s/ KEVIN C. DALY ----- Kevin C. Daly | Director | September 30, 1999 |
| /s/ CRANDALL GUDMUNDSON ----- Crandall Gudmundson | Director | September 30, 1999 |
| /s/ RALPH R. MICKESON ----- Ralph R. Mickelson | Director | September 30, 1999 |
| /s/ JERRY F. MUENCH ----- Jerry F. Muench | Director | September 30, 1999 |

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| | | |
|---|----------|--------------------|
| /s/ JOHN W. SEAZHOLTZ ----- John W. Seazholtz | Director | September 30, 1999 |
| /s/ THOMAS L. THOMAS ----- Thomas L. Thomas | Director | September 30, 1999 |
| /s/ PAUL E. WRIGHT ----- Paul E. Wright | Director | September 30, 1999 |

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OPINION OF BROBECK, PHLEGER & HARRISON LLP

September 29, 1999

EXHIBIT 5.1

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

Re: Odetics, Inc. Registration Statement on Form S-3
for the Resale of 53,343 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 53,343 shares (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, 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 Odetics or the Shares.

Very truly yours,

BROBECK, PHLEGER & HARRISON LLP

CONSENT OF INDEPENDENT AUDITORS

EXHIBIT 23.1

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 53,343 shares of its Class A Common Stock and to the incorporation by reference therein of our report dated May 11, 1999, except for Note 1 as to which the date is June 24, 1999, with respect to the consolidated financial statements and schedule of Odetics, Inc. included its Annual Report (Form 10-K/A) for the year ended March 31, 1999, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Orange County, California
September 23, 1999