DIGITAL ANGEL CORP
Form S-1
November 01, 2002

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As filed with the Securities and Exchange Commission on November 1, 2002

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT
Under
The Securities Act of 1933

DIGITAL ANGEL CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**8082**	**52-1233960**
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

490 Villaume Avenue, South St. Paul, MN 55075
(651) 455-1621
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Principal Executive Offices)

Randolph K. Geissler
President
490 Villaume Avenue
South St. Paul, MN 55075
(Name and Address of Agent for Service)

(651) 455-1621
(Telephone Number, Including Area Code, of Agent for Service)

copy to:

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Washington, D.C. 20036
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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: ____________.

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, check the following box. ý

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) 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. o ____________________

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. o ____________________

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

CALCULATION OF REGISTRATION FEE

Title of Securities To Be Registered	Amount To Be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, $0.005 par value	25,348,720	$2.57(1)	$65,146,210(1)	$5,993.45

(1) Estimated in accordance with Rule 457 solely for the purpose of determining the registration fee.

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, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission (SEC), acting pursuant to said Section 8(a), may determine.

A registration statement relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. Information contained herein is subject to completion or amendment. 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 registration or qualification under the securities laws of any such state.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the SEC is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated November 1, 2002

PROSPECTUS

DIGITAL ANGEL CORPORATION

25,348,720 Shares

Common Stock

This is a public offering of common stock of Digital Angel Corporation. We are offering for sale an aggregate of 3,000,000 shares of our common stock and certain of our existing stockholders are offering for sale up to 22,348,720 shares of our common stock.

Certain shares of our common stock are being registered to permit the selling stockholders to sell the shares of common stock from time to time in the public market. The selling stockholders may sell the shares of our common stock through ordinary brokerage transactions or through any other means described in this prospectus under "PLAN OF DISTRIBUTION." The price 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 cannot assure you that the selling stockholders will sell all or a portion of the shares of our common stock offered under this prospectus.

In addition, certain shares of our common stock are being registered to permit us to offer shares of our common stock from time to time, at prices and on terms to be determined. For a discussion of the factors that we will consider in determining the public offering price of the shares of our common stock sold by us, see "PLAN OF DISTRIBUTION" beginning on p. 55 of this prospectus.

Our common stock is listed on the American Stock Exchange (AMEX) under the symbol "DOC." On October 25, 2002, the last reported sale price of our common stock was $2.50.

Investing in shares of our common stock involves risks. See, "RISK FACTORS" beginning on p. 6 of this prospectus for a discussion of these risks.

Neither the SEC 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.

No dealer, salesperson or other person has been authorized to give any information or to make any representations other than those contained in or incorporated by reference into this prospectus in connection with the offer contained in this prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither the delivery of this prospectus nor any sale made hereunder shall under any circumstances create an implication that there has been no change in our affairs since the date hereof. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where such offers and sales are permitted. The information contained in, and incorporated by reference into, this prospectus speaks only as of the date of this prospectus unless the information specifically indicates that another date applies.

The date of this prospectus is November 1, 2002.

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PROSPECTUS SUMMARY

This summary highlights information described more fully elsewhere in this prospectus and may not contain all of the information that may be important to you. You should read this entire prospectus carefully, including the consolidated financial statements and related notes and other financial data included in this prospectus, before making an investment decision. You should also carefully consider the information set forth under "RISK FACTORS" beginning on p. 6.

As used in this prospectus, the terms "we," "us," "our," "our company," and "Digital Angel Corporation" mean Digital Angel Corporation and our subsidiaries, unless the context otherwise requires.

Business

We were incorporated in Delaware on December 1, 1981 as "Medical Advisory Systems, Inc." to provide medical assistance and technical products and services. On March 27, 2002, we completed a merger pursuant to which Digital Angel Acquisition Co., then a wholly-owned subsidiary of Medical Advisory Systems, Inc., merged with and into Digital Angel Corporation, which was then a 93.0%-owned subsidiary of Applied Digital Solutions, Inc. In the merger, the corporate existence of Digital Angel Acquisition ceased, Digital Angel Corporation became a wholly-owned subsidiary of Medical Advisory Systems, and Medical Advisory Systems was renamed "Digital Angel Corporation." In connection with the merger transaction, Applied Digital Solutions contributed to Medical Advisory Systems all of its stock in Timely Technology Corp., a wholly-owned subsidiary, and Signature Industries, Limited, an 85.0%-owned subsidiary. These two subsidiaries along with Digital Angel Corporation comprised Applied Digital Solutions' Advanced Wireless Group. As a result of this contribution by Applied Digital Solutions, Timely Technology became a wholly-owned subsidiary of Digital Angel Corporation and Signature Industries became an 85.0%-owned subsidiary. Prior to the merger with Digital Angel Corporation, Applied Digital Solutions owned 850,000 shares of Medical Advisory Systems common stock representing approximately 16.6% of the outstanding common stock of Medical Advisory Systems.

Following the merger, the scope of our business was expanded to include the development and commercialization of proprietary technologies used to identify, locate and monitor people, animals and objects. Our business is presently organized into four segments: Animal Applications, Digital Angel Systems, GPS and Radio Communications, and Physician Call Center and Other. We are a Delaware corporation located at 490 Villaume Avenue, South St. Paul, MN 55075. Our telephone number is 651-455-1621. For a more complete discussion of our company, see "BUSINESS" on p. 12.

The Offering

This prospectus covers up to 3,000,000 shares of our common stock to be sold from time to time by us at prices and on terms to be determined. This prospectus also covers up to 22,348,720 shares of our common stock to be sold by the selling stockholders identified in this prospectus. We and the selling stockholders, or their pledgees, donees, transferees or other successors in interest may, from time to time, sell all or a portion of the shares at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to such market prices or at negotiated prices. We and the selling stockholders may also sell our shares directly to purchasers or may use brokers, dealers, underwriters or agents to sell our shares upon terms and conditions that will be described in the applicable prospectus supplement.

From time to time the selling stockholders may be engaged in short sales, short sales against the box, puts and calls and other hedging transactions in our securities, and may sell and deliver the shares in connection with such transactions or in settlement of securities loans. These transactions may be entered into with broker-dealers or other financial institutions. In addition, from time to time, a selling

stockholder may pledge its shares pursuant to the margin provisions of its customer agreements with its broker-dealer. Upon delivery of the shares or a default by a selling stockholder, the broker-dealer or financial institution may offer and sell the pledged shares from time to time. For a more complete description of the offering see "PLAN OF DISTRIBUTION" on p. 55.

Use of Proceeds

We do not currently have specific plans for the use of net proceeds from our sale of our common stock. We anticipate that any such net proceeds will be used for general corporate purposes, which may include, but not be limited to, working capital, capital expenditures, repayment of indebtedness, investments and acquisitions. All net proceeds from the sale of our common stock by the selling stockholders will go to the selling stockholders and we will not receive any proceeds from the sale of the common stock by the selling stockholders.

SUMMARY FINANCIAL DATA
(In thousands, expect per share amounts)

We derived the following historical financial information from the combined financial statements of the Advanced Wireless Group for the years ended December 31, 2001, 2000 and 1999 which have been audited by PricewaterhouseCoopers LLP. PricewaterhouseCoopers LLP's report on the combined financial statements contained an explanatory paragraph expressing doubt about the Advanced Wireless Group's ability to continue as a going concern. In addition, PricewaterhouseCoopers LLP was dismissed as the Advanced Wireless Group's independent accountant on April 11, 2002. The merger between Digital Angel Corporation and Medical Advisory Systems on March 27, 2002 has been treated as a reverse acquisition for accounting purposes, with the Advanced Wireless Group treated as the accounting acquirer. Accordingly, the historical combined financial statements of the Advanced Wireless Group became those of Digital Angel Corporation, and the acquisition of Medical Advisory Systems was accounted for under the purchase method of accounting. Additionally, the equity accounts of the Advanced Wireless Group have been restated based on the common shares received by the former shareholders of the Advanced Wireless Group in the merger.

The unaudited financial data as of and for the six months ended June 30, 2002 and 2001 include adjustments, all of which are normal recurring adjustments, which our management considers necessary for fair presentation of our results for these unaudited periods. The results of operations for the six

months ended June 30, 2002 and 2001 are not necessarily indicative of the results that may be expected for a full year.

	For the Six Months Ended June 30,		For the Years Ended December 31,		
	2002(1)	2001	2001	2000(2)	1999
	(Unaudited)				
Statement of Operations Data:					
Product revenue	$ 16,113	$ 16,752	$ 33,220	$ 19,604	$ 14,380
Service revenue	880	1,922	2,518	2,647	
Total net revenue	16,993	18,674	35,738	22,251	14,380
Cost of products sold	9,135	9,961	20,252	11,517	7,964
Cost of services sold	498	1,028	2,047	1,434	
Gross profit	7,360	7,685	13,439	9,300	6,416
Selling, general and administrative expenses(3)	25,815	5,139	10,467	7,830	6,948
Research and development expenses	1,545	2,410	5,071	2,235	
Asset impairment charge			726		
Depreciation and amortization	1,830	5,383	12,331	2,962	565
Interest income		(11)	(17)	(26)	
Interest expense-Applied Digital Solutions, Inc.	1,806				

	For the Six Months Ended June 30,		For the Years Ended December 31,		
Interest expense-others	125	151	2,119	115	41
Loss before taxes, minority interest and equity in net loss of affiliate	(23,761)	(5,387)	(17,258)	(3,816)	(1,138)
Provision for income taxes		107	41	58	
Loss before minority interest and equity in net loss of affiliate	(23,761)	(5,494)	(17,299)	(3,874)	(1,138)
Minority interest share of losses	(43)	(27)	(217)	(4)	(170)
Equity in net loss (income) of affiliate	291	67	327		
Net loss	$ (24,009)	$ (5,534)	$ (17,409)	$ (3,870)	$ (968)
Net loss per common share-basic and diluted	$ (1.06)	$ (0.30)	$ (0.93)	$ (0.21)	$ (0.05)
Weighted average common shares outstanding-basic and diluted(4)	22,616	18,750	18,750	18,750	18,750
Balance Sheet Data:					
Cash and cash equivalents	$ 584	$	$ 596	$ 206	$ 139
Property and equipment, net	14,951	15,503	14,476	5,408	1,115
Goodwill and other intangibles, net	106,258	76,776	72,876	77,645	2,713
Total assets	133,821	113,008	107,379	95,344	9,239
Long-term debt and notes payable	2,410	76	2,425	2,463	
Total debt	2,797	2,519	85,068	2,503	
Minority interest	351	585	394	612	616
Total stockholders' equity	122,763	104,374	16,116	87,809	5,574
Other Financial Data:					
Depreciation and Amortization	$ 1,830	$ 5,383	$ 12,331	$ 2,962	$ 565
Net cash provided by (used in) operating activities	(854)	(756)	(3,196)	(1,432)	14
Net cash provided by (used in) investing activities	(547)	(829)	(1,307)	1,066	(88)
Net cash provided by financing activities	1,389	1,379	4,893	433	212
Adjusted EBITDA(5)	(1,567)	96	(2,935)	(761)	(362)
Capital expenditures	673	1,091	1,310	758	106

Effective January 1, 2002, we adopted Statement of Financial Accounting Standard No. 142, "Goodwill and Other Intangible Assets" (FAS 142). FAS 142 requires that goodwill and certain intangibles no longer be amortized but instead tested for impairment at least annually.

The following table presents the impact of FAS 142 on our summary financial data as indicated:

	For the Six Months Ended June 30,	For the Years Ended December 31,		
	2001	2001	2000	1999
Net loss:				
Net loss as reported	$ (5,534)	$ (17,409)	$ (3,870)	$ (968)
Goodwill amortization	3,959	8,629	2,529	256
Equity method investment amortization	449	1,161		

	For the Six Months Ended June 30,	For the Years Ended December 31,		
Adjusted net loss	$ (1,126)	$ (7,619)	$ (1,341)	$ (712)
Basic and diluted loss per share:				
Net loss per share, basic and diluted, as reported	$ (0.30)	$ (0.93)	$ (0.21)	$ (0.05)
Goodwill amortization	0.21	0.46	0.13	0.01
Equity method investment amortization	0.03	0.06		
Adjusted net loss per share, basic and diluted	$ (0.06)	$ (0.41)	$ (0.08)	$ (0.04)

(1) Includes the results of operations of Medical Advisory Systems from March 27, 2002.

(2) Includes the results of operations of (i) Timely Technology from April 1, 2000 and (ii) Destron Fearing Corporation from September 8, 2000.

(3) Selling, general and administrative expenses include management fees paid to Applied Digital Solutions of $193, $371, $771, $262 and $241 for the six months ended June 30, 2002 and 2001 and the years ended December 31, 2001, 2000 and 1999.

(4) Weighted average shares outstanding for the six months ended June 30, 2001, for the years ended December 31, 2001, 2000 and 1999 have been restated to reflect the number of common shares received by the former shareholders of the Advanced Wireless Group in the March 27, 2002 merger.

(5) Adjusted EBITDA is the sum of earnings before interest, taxes, depreciation, amortization and non-cash compensation expense of $18,681 arising from the remeasurement of options in connection with the March 27, 2002 merger. Adjusted EBITDA should not be regarded as an alternative for other performance measures and should not be considered in isolation. Adjusted EBITDA is not a measurement of financial performance under generally accepted accounting principles and does not reflect all expenses of doing business (e.g. interest expense, depreciation). Accordingly, Adjusted EBITDA should not be considered as having greater significance than or as an alternative to net income or operating income as indicator of operating performance or to cash flows as a measure of liquidity. In addition, our calculation of Adjusted EBITDA may not be comparable to similarly titled measures reported by other companies.

RISK FACTORS

You should carefully consider the following risk factors and other information contained in or incorporated by reference into this prospectus and any accompanying prospectus supplement before deciding to purchase any shares of our common stock.

Our majority stockholder, the Digital Angel Share Trust, owns 74.1% of our common stock, is able to completely control our board of directors and may support action that conflicts with the interests of the other stockholders.

On March 27, 2002, we completed a merger that resulted in our acquisition of Digital Angel Technology Corporation (formerly Digital Angel Corporation), Timely Technology and an 85.0% interest in Signature Industries from Applied Digital Solutions. The merger agreement required that the stock of these three companies and the assets of Digital Angel Technology Corporation, all of which were pledged by Applied Digital Solutions as security for substantial indebtedness to IBM Credit Corporation, be delivered to us at the closing of the merger, free and clear of all liens, security interests and mortgages. As part of a major restructuring of its lending relationship with Applied Digital Solutions and as one of the conditions to releasing its security interest in the stock of these transferred companies and the assets of Digital Angel Technology Corporation and consenting to the merger, IBM Credit Corporation required Applied Digital Solutions to transfer all of the shares of our common stock owned by Applied Digital Solutions following the merger to the Digital Angel Share Trust, one of the selling stockholders under this prospectus. As a result of this transfer, the Digital Angel Share Trust currently owns approximately 74.1% of our outstanding common stock. The Digital Angel Share Trust is able to control completely our board of directors and decide all matters submitted to our stockholders for approval.

The Digital Angel Share Trust is controlled by an independent advisory board and there can be no assurance as to how the Digital Angel Share Trust will exercise control over us. The Digital Angel Share Trust may support action that is contrary to or conflicts with the interests of the other stockholders.

Upon the request of IBM Credit Corporation, the Digital Angel Share Trust is obligated to sell the shares of our common stock owned by the Digital Angel Share Trust for the benefit of IBM Credit Corporation in the event Applied Digital Solutions fails to make payments to IBM Credit Corporation beginning on February 28, 2003 or at such other time as Applied Digital Solutions otherwise defaults under its credit agreement with IBM Credit Corporation. Such sales may be in private transactions or in the public market. We can give no assurance as to when or how shares of our common stock will be sold or as to who will purchase such shares. As a result, the duration of the Digital Angel Share Trust's control over us, the identity of any parties that may acquire control of us and the effect on the market price of our stock if and when such sales commence is uncertain.

At June 30, 2002, Applied Digital Solutions was out of compliance with certain of the covenants of the IBM credit agreement. In addition, we have failed to comply with certain financial covenants contained in the IBM credit agreement that we were required to meet to prevent Applied Digital Solutions' default under the IBM credit agreement. IBM Credit Corporation has waived such noncompliance at June 30, 2002.

On September 30, 2002, the debt covenants in the IBM credit agreement were amended for the remainder of 2002. The amendment reduced our current ratio and Minimum Cumulative Modified EBITDA requirements, as defined in the IBM credit agreement, for the quarters ended September 30, 2002 and December 31, 2002. We expect to be in compliance with our debt covenants at September 30, 2002 and December 31, 2002, however there can be no assurances.

The terms of our credit facility subject us to the risk of foreclosure on substantially all of our assets.

On October 30, 2002, we executed a credit and security agreement with Wells Fargo Business Credit, Inc. that, among other things, permits us to borrow up to $5,000,000 from time to time in accordance with, and pursuant to the terms of the credit and security agreement. Amounts borrowed under the credit facility are general obligations of our company secured by a first priority lien on substantially all of our assets, including, but not limited to, our accounts receivable and our patents and other intellectual property relating to the Digital Angel product.

The credit and security agreement requires us to comply with certain financial covenants, including a monthly minimum book net worth, monthly minimum earnings before taxes and a limitation on capital expenditures during 2003. There can be no assurance that we will continue to meet these financial covenants. Any breach of these financial covenants by us will constitute an event of default under the credit and security agreement. The credit and security agreement also provides that any change of control of our company will constitute an event of default under the credit and security agreement. A change of control will include, but not be limited to, the acquisition by any person or group of persons of more than 25% of the voting power of all classes of our common stock. In the event Applied Digital Solutions defaults under the IBM credit agreement, the Digital Angel Share Trust will be obligated, upon the request of IBM Credit Corporation, to sell all or a portion of our common stock held by the Digital Angel Share Trust. To the extent such sales by the Digital Angel Share Trust result in a person or group of persons owning, in the aggregate, 25% or more of our common stock, such sales will be deemed to constitute an event of default under the credit and security agreement. There can be no assurance that Applied Digital Solutions will not default under the IBM credit agreement or that, upon any such default, IBM Credit Corporation will not cause the sale of more than 25% of our common stock to any person or group of persons. See, "RISK FACTORS Our majority stockholder, the Digital Angel Share Trust, owns 74.1% of our common stock, is able to completely control our board of directors and may support action that conflicts with the interests of other stockholders."

The credit facility will expire on October 30, 2005, at which time the entire outstanding balance of the credit facility will become due and payable. It is possible that we may not have sufficient funds to repay the outstanding balance on the credit facility when it becomes due and payable. Accordingly, it is possible that we will need to obtain the funds necessary to repay the credit facility either through the refinancing of the credit facility, the issuance of additional equity or debt securities or the sale of assets. We have not received a commitment from any institutional or other lender or investor to loan the funds or purchase any equity or debt securities which we may seek to issue to refinance our indebtedness under the credit facility. If we are unable to obtain funds to repay this indebtedness on acceptable terms, or at all, we may be forced to dispose of assets or take other actions on disadvantageous terms, which could result in losses to our company and have a material adverse effect on our financial condition. For these reasons, there can be no assurance that we will be able to repay the credit facility upon its maturity.

The occurrence of any of the foregoing, or any other events of default, under the credit and security agreement would subject us to the risk of foreclosure by Wells Fargo Business Credit on substantially all of our assets to the extent necessary to repay any amounts due under the credit facility, including, but not limited to, principal, interest, penalties or other costs and expenses incurred. Any such default and resulting foreclosure would have a material adverse effect on our financial condition.

Sales of our common stock by the Digital Angel Share Trust may cause a reduction in the market value of our common stock.

In the event Applied Digital Solutions fails to pay amounts due to IBM Credit Corporation, or if Applied Digital Solutions otherwise defaults under the IBM credit agreement and its obligations are

accelerated, IBM Credit Corporation has the right to require the Digital Angel Share Trust to sell shares of our common stock to provide funds to satisfy the obligations of Applied Digital Solutions to IBM Credit Corporation. It is unlikely that Applied Digital Solutions will have the funds required for payment of such obligations when due. The sale of a significant amount of shares of our common stock owned by the Digital Angel Share Trust in a single transaction or in a series of transactions over a short period of time could result in a significant decline in the market value of our common stock.

Historical losses and negative cash flows from operations raise doubt about our ability to continue as a going concern.

We have suffered losses and have not generated positive cash flows from operations. This raises substantial doubt about our ability to continue as a going concern. PricewaterhouseCoopers LLP's audit report for each of the years ended December 31, 2001 and 2000 for the Advanced Wireless Group financial statements, which became our historical financial statements in the merger, contained an explanatory paragraph expressing doubt about the Advanced Wireless Group's ability to continue as a going concern. The audited Advanced Wireless Group financial statements as of and for the three years ended December 31, 2001 and our condensed consolidated financial statements as of and for the six months ended June 30, 2002, which are included in this prospectus, do not include adjustments that might be required as a result of this uncertainty. We believe that we will have the financial resources to meet our future business requirements for at least the next twelve months.

Our earnings will decline if we write off goodwill.

As of June 30, 2002, we have recorded goodwill of $106.2 million. Due to new accounting standards that went into effect on January 1, 2002, goodwill and other intangible assets with indefinite lives are not amortized, but rather tested for impairment annually. There was no impairment of goodwill upon adoption of this standard. As a result, we will assess the fair value of our goodwill annually or between annual tests if events occur or circumstances change that would more likely than not reduce the fair value of our goodwill below its carrying value. If we ever determine that significant impairment has occurred, we would be required to write off the impaired portion of goodwill. An impairment charge, if any, could have a material adverse effect on our financial condition and results of operations.

The significant number of options and warrants outstanding may adversely affect the market price of our common stock.

As of June 30, 2002, there are outstanding (i) options and warrants to purchase an aggregate of 5,206,319 shares of our common stock at exercise prices ranging from $0.05 to $10.50 and (ii) 8,877,899 additional shares of our common stock, which may be issued in the future under our stock options plans. To the extent that outstanding options and warrants are exercised, your percentage ownership will be diluted and any sales in the public market of the common stock underlying such options or warrants may adversely affect prevailing market prices for our common stock.

The Digital Angel Systems segment is expected to incur future losses and may not achieve profitability.

We have invested more than $12.5 million in the Digital Angel product since April 1998. We expect the Digital Angel Systems segment to incur additional development, sales and marketing, and other general expenses. As a result, the Digital Angel Systems segment is expected to incur losses for the foreseeable future and will need to generate significant revenues to achieve profitability. There can be no assurance that the segment will achieve profitability or, if profitability is achieved, that it will be sustained. The failure to achieve or sustain profitability will have a material adverse effect on the market value of our common stock.

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The Digital Angel Systems segment is in the initial stage of operations and may encounter unforeseen difficulties that could negatively impact our business.

The Digital Angel Systems segment develops and markets advanced technology to gather location and local sensory data and to communicate that data to an operations center. This segment is developing our Digital Angel product. The Digital Angel Systems segment is in the initial stage of operations. As a result, it has minimal operating history upon which to base an evaluation of its current business and future prospects. The first Digital Angel product was introduced in November 2001 and this segment has generated no significant revenue. Moreover, this segment does not currently have any contracts in place that will provide any significant revenue. Because of this segment's lack of an operating history, management has limited insight into trends that may emerge and could materially adversely affect its business. Prospective investors should consider the risks and difficulties the Digital Angel Systems segment may encounter in its new and rapidly evolving market, especially given the segment's lack of operating history. These risks include our ability to:

- develop and market the Digital Angel product by integrating and miniaturizing new technologies into marketable products and services;
- build a customer base;
- generate revenues;
- compete successfully in a highly competitive market;
- access sufficient capital to support growth;
- recruit and retain qualified employees;
- introduce new products and services; and
- build technology and support systems.

Each of these risks could lead to unforeseen expenses or losses, which could have a material adverse effect on our financial condition and results of operations.

Infringement by third parties on our intellectual property and development of substantially equivalent proprietary technology by our competitors could negatively impact our business.

Our success depends significantly on our ability to maintain patent and trade secret protection, to obtain future patents and licenses, and to operate without infringing on the proprietary rights of third parties. There can be no assurance that the measures we have taken to protect our intellectual property, including those relating to our Digital Angel technology, will prevent misappropriation or circumvention of our intellectual property. In addition, there can be no assurance that any patent application, when filed, will result in an issued patent, or that our existing patents, or any patents that may be issued in the future, will provide us with significant protection against competitors. Moreover, there can be no assurance that any patents issued to, or licensed by, us will not be infringed upon or circumvented by others. Moreover, litigation to establish the validity of patents, to assert infringement claims against others, and to defend against patent infringement claims can be expensive and time-consuming, even if the outcome is in our favor. We also rely to a lesser extent on unpatented proprietary technology, and no assurance can be given that others will not independently develop substantially equivalent proprietary information, techniques or processes or that we can meaningfully protect our rights to such unpatented proprietary technology. Infringement on our intellectual property or the development of substantially equivalent technology by our competitors could have a material adverse effect on our business.

Domestic and foreign government regulation and other factors could impair our ability to develop and sell our products in certain markets.

The electronic animal identification market can be negatively affected by such factors as food safety concerns, consumer perceptions regarding cost and efficacy, international technology standards, national infrastructures, and slaughterhouse removal of microchips.

We are also subject to federal, state and local regulation in the United States, including regulation by the United States Food and Drug Administration (FDA), United States Federal Communications Commission (FCC) and United States Department of Agriculture (USDA) and other countries, and we cannot predict the extent to which we may be affected by future legislative and regulatory developments concerning our products and markets. We are required to obtain regulatory approval before marketing most of our products. The regulatory approval process can be very time consuming and costly and there is no assurance that we will receive the regulatory approvals necessary to sell our products. Regulatory authorities also have the authority to revoke approval of previously approved products for cause, to request recalls of products and to close manufacturing plants in response to violations. Any such regulatory action, including the failure to obtain such approval could prevent us from selling, or materially impair our ability to sell our products in certain markets and could negatively impact our business.

We rely heavily on sales to government contractors of our animal identification products and any decline in the demand by these customers for our products could negatively impact our business.

Many of the principal customers for electronic identification devices for fish are government contractors that rely on funding from the United States government. Since these contractors rely heavily on government funds, any decline in the availability of such funds could result in a decreased demand by these contractors for our products. Any decrease in demand by such customers could have a material adverse affect on our financial condition and results of operations, and result in a decline in the market value of our common stock.

We depend on a single supplier for our animal identification products and the loss of, or any significant reduction in production by, our supplier could have a material adverse effect on our business.

We rely solely on a production arrangement with Raytheon Corporation for the manufacture of our syringe-injectable microchips that are used in all of our electronic identification products. The termination, or any significant reduction, by Raytheon of its production of these microchips or a material increase in the price charged by Raytheon for these microchips could have a material adverse effect on our financial condition and results of operations. In addition, Raytheon may not be able to produce sufficient quantities of the microchips to meet any significant increased demand for our products or to meet any such demand on a timely basis. Any inability or unwillingness of Raytheon to meet our demand for microchips could result in a material decrease in sales of our animal identification products. Moreover, in the event Raytheon terminates our production arrangement, we cannot ensure that we will be able to obtain the microchips from another source on comparable or acceptable terms. The failure to make such alternative production arrangements could have a material adverse effect on our business.

We compete with other companies in the visual and electronic identification market and the products sold by our competitors could become more popular than our products or render our products obsolete.

The market for visual and electronic identification for companion animals and livestock is highly competitive. We believe that our principal competitors in the visual identification market for livestock

are AllFlex USA and Y-Tex Corporation, and our principal competitors in the electronic identification market that have developed permanent electronic identification devices for the companion animal market are AllFlex USA, Datamars SA and Avid Plc. Neither Datamars nor Avid has been granted a U.S. license to use our implantable technology.

In addition, other companies could enter this line of business in the future. Certain of our competitors have substantially greater financial and other resources than us. We may not be able to compete successfully with these competitors and these competitors may develop or market technologies and products that are more widely accepted than ours or that would render our products obsolete or noncompetitive. Our principal competitor in this area is Wherify Wireless, Inc. We are not aware of any other competitors currently marketing products that compete with the Digital Angel   product. However, we are aware of several potential competitors that have expressed an interest in similar technologies. We are unaware of any actual sales of a competing product. If such competitors enter the market and compete with the Digital Angel   product, such competition could have a material adverse effect on our business.

We are subject to certain risks as a result of our foreign operations.

We maintain international operations, which subjects us to certain risks that are inherent in international operations, including the risk that:

- we will have difficulty enforcing agreements and collecting receivables through certain foreign legal systems;
- foreign customers may have longer payment cycles than customers in the United States;
- tax rates in certain foreign countries may exceed those in the United States and foreign earnings may be subject to withholding requirements or the imposition of tariffs, exchange controls or other restrictions;
- general economic and political conditions in countries where we operate may have an adverse effect on our operations in those countries;
- the difficulties associated with managing a large organization spread throughout various countries may adversely affect our business in those countries; and
- required compliance with a variety of foreign laws and regulations may prove onerous and adversely affect our operations abroad.

As we continue to expand our business globally, our success will be dependent, in part, on our ability to anticipate and effectively manage these and other risks. These and other factors may have a material adverse effect on our international operations or our business as a whole.

Currency exchange rate fluctuations could have an adverse effect on our sales and financial results.

We generate a portion of our sales and incur a portion of our expenses in currencies other than U.S. dollars. To the extent that we are unable to match revenues received in foreign currencies with costs paid in the same currency, exchange rate fluctuations in any such currency could have an adverse effect on our financial results.

The Digital Angel product is not proven and we may not be able to develop products from this unproven technology.

The Digital Angel Systems segment depends on the development, integration, miniaturization and marketing of several advanced technologies that have not previously been integrated or used as anticipated by this segment. The Digital Angel Systems segment depends upon advanced technology

including: wireless communication, biosensors, motion determination and global positioning system capability. Many of these technologies are unproven or relatively new. These technologies have not been previously integrated or miniaturized into a commercial product. No assurance can be given as to when or if the Digital Angel product will be successfully marketed. Our ability to develop and commercialize products based on our proprietary technology will depend on our ability to develop our products internally on a timely basis or to enter into arrangements with third parties to provide these functions. Our failure to develop and commercialize products successfully could have a material adverse effect on our financial condition and results of operations.

FORWARD-LOOKING STATEMENTS

This prospectus and any prospectus supplement may contain "forward-looking statements," which represent our expectations or beliefs, including, but not limited to, statements concerning industry performance and our results, operations, performance, financial condition, plans, growth and strategies, which include, without limitation, statements preceded or followed by or that include the words "may," "will," "expect," "anticipate," "intend," "could," "estimate," or "continue" or the negative or other variations thereof or comparable terminology. Any statements contained in this prospectus, any prospectus supplement or the information incorporated by reference that are not statements of historical fact may be deemed to be forward-looking statements. These statements by their nature involve substantial risks and uncertainties, some of which are beyond our control, and actual results may differ materially depending on a variety of important factors, many of which are also beyond our control. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. We do not undertake any obligation to update or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events, except to the extent such updates and/or revisions are required to prevent these forward-looking statements from being materially false or misleading.

BUSINESS

Overview

We were incorporated in Delaware on December 1, 1981 as Medical Advisory Systems, Inc. to provide medical assistance and technical products and services. On March 27, 2002, we completed a merger pursuant to which Digital Angel Acquisition, then a wholly-owned subsidiary of Medical Advisory Systems, merged with and into Digital Angel Corporation, which was then a 93.0%-owned subsidiary of Applied Digital Solutions. In the merger, the corporate existence of Digital Angel Acquisition ceased, Digital Angel Corporation became a wholly-owned subsidiary of Medical Advisory Systems, and Medical Advisory Systems was renamed "Digital Angel Corporation." In connection with the merger transaction, Applied Digital Solutions contributed to Medical Advisory Systems all of its stock in Timely Technology, a wholly-owned subsidiary, and Signature Industries, an 85.0%-owned subsidiary. These two subsidiaries along with Digital Angel Corporation comprised Applied Digital Solutions' Advanced Wireless Group. As a result of this contribution by Applied Digital Solutions, Timely Technology became a wholly-owned subsidiary of Digital Angel Corporation and Signature Industries became an 85.0%-owned subsidiary. Prior to the merger, Applied Digital Solutions owned 850,000 shares of Medical Advisory Systems common stock representing approximately 16.6% of the outstanding common stock of Medical Advisory Systems.

Following the merger, the scope of our business was expanded to include the development and commercialization of proprietary technologies used to identify, locate and monitor people, animals and objects. Our business is presently organized into four segments: Animal Applications, Digital Angel Systems, GPS and Radio Communications, and Physician Call Center and Other. We are a Delaware corporation located at 490 Villaume Avenue, South St. Paul, MN 55075. Our telephone number is 651-455-1621.

Animal Applications

Our Animal Applications segment develops, manufactures and markets radio, electronic and visual identification devices for the companion animal, livestock, laboratory animal, fish and wildlife markets worldwide.

The Animal Applications segment's radio frequency identification products consist of miniature electronic microchips, readers and injection systems. We hold patents on our syringe-injectable microchip, which is encased in a glass or glass-like material capsule and incorporates an antenna and a microchip with a unique permanent identification code for the animal in which it is implanted. The microchip is typically injected under the skin using a hypodermic syringe, without requiring surgery. An associated reader device uses radio frequency to interrogate the microchip and read the code.

The Animal Applications segment's pet identification system involves the insertion of a microchip with identifying information in the animal. Readers at animal shelters, veterinary clinics and other locations can determine the animal's owner and other information. This pet identification system is marketed in the United States by Schering-Plough Pharmaceutical under the brand name "Home Again ," in Europe by Merial Pharmaceutical, and in Japan by Dainippon Pharmaceutical. The Animal Applications segment also has distribution agreements with a variety of other companies outside the United States to market our products. The Animal Applications segment has an established infrastructure with readers placed in approximately 20,000 domestic animal shelters and veterinary clinics. Over 1.5 million companion animals in the United States have undergone microchipping, resulting in approximately 4,000 pet recoveries in the United States each month.

In addition to pursuing the market for permanent identification of companion animals, the Animal Applications segment also produces visual and electronic identification products, principally for livestock producers. Visual identification products typically include numbered ear tags. The Animal

Applications segment also produces and markets products for the permanent electronic identification of livestock.

The USDA has given clearance for implanting microchips in food animals, enabling us to market our electronic identification products to the United States livestock market. Implantation of the segment's electronic microchips was previously cleared by the FDA, subject to a determination by USDA as to anatomical implant sites in livestock animals. USDA has identified four implantation sites, all in inedible tissue, where it has been demonstrated there will be minimal or no migration of the implanted device. We are now able to actively promote our implantable system in the United States, and we anticipate that USDA clearance will result in increased use of microchips in connection with disease control programs.

Some of the Animal Applications segment's customers, such as the U.S. Department of Energy (DOE) track fish to locate and protect spawning pools and to track migratory patterns for research and fishing purposes. Our fish scanning system has become DOE's standard system and we have been installing our high-speed scanners at selected dam sites in the Columbia River basin since 1998.

We rely heavily on a few customers for sales of our electronic animal identification products, the loss of one or more would have a material adverse effect on our business. See, "RISK FACTORS" on p. 6.

We rely solely on a production arrangement with Raytheon Corporation for the manufacture of our syringe-injectable microchips that are used in all of our electronic identification products, including our electronic animal identification products. See, "RISK FACTORS" on p. 6.

Digital Angel Systems

Our Digital Angel Systems segment is in the initial stage of operations. This segment develops and markets advanced technology to gather location and local sensory data and to communicate that data to an operations center. This segment is continuously developing its technology, which it refers to as its "Digital Angel technology." The Digital Angel technology is the integration and miniaturization into marketable products of three technologies: wireless communication (*e.g.* cellular), sensors (including bio-sensors) and position location technology (including global positioning systems (GPS) and other systems).

After the Digital Angel technology gathers location data and local sensory data and communicates that data to an operations center, the operations center can perform an action based on the data received (*e.g.*, alert a doctor or update shipment information). We plan to introduce this technology into a variety of products to suit different applications ranging from medical monitoring to asset management. These products have been in the developmental stage since April 1998. The first Digital Angel technology product was launched in November 2001.

We have developed a system for managing the data to be communicated from products using the Digital Angel technology. We refer to this system as the Digital Angel Delivery System (DADS). DADS manages data in an application-specific format. DADS works by combining highly complex software that is responsible for data collection and delivery with the advanced infrastructure needed to operate it. The DADS software is divided into the following interconnected functional areas:

Data Collection. This component acquires real-time data from the devices incorporating the Digital Angel technology (*e.g.*, location, temperature and identifying information). DADS collects the data received from devices using the technology, identifies the source of data and routes it to the appropriate middle tier components.

Business Intelligence. This component incorporates the data storage capabilities, data analysis functions, application specific algorithms and the notification engine.

Data Delivery. This component provides data storage, retrieval services and a delivery service, which allow information delivery via a variety of channels (*e.g*., web browsers, wireless devices, cell phones, pagers, e-mail, embedded devices or other devices).

The Digital Angel Systems segment also is engaged in the business of developing a broad spectrum of software and systems, including management information systems used in our Animal Applications business, the design and marketing of financial and accounting software packages for school districts, processing the data associated with product returns for customers on a contract basis and other services.

GPS and Radio Communications

Signature Industries, located in the United Kingdom, operates our GPS and Radio Communications business. This segment consists of the design, manufacture and support of secure GPS enabled search and rescue equipment (such as personal locator beacons) and intelligent communications products and services for telemetry, mobile data and radio communications applications serving commercial and military markets. This segment includes the design, manufacture and distribution of intrinsically safe sounders (horn alarms) for industrial use and other electronic components. This segment also includes a growing business in high grade communications equipment leasing and complementary data systems that customers can use to locate and monitor their assets.