APPLIED SIGNAL TECHNOLOGY INC
Form 10-K
January 27, 2004

**United States**
**Securities and Exchange Commission**
**Washington, D.C. 20549**

**Form 10-K**

(Mark One)

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

**For the Fiscal Year Ended October 31, 2003**

or

[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Transition Period from _____ to _____.

Commission file number 0-21236

**Applied Signal Technology, Inc.**

(Exact name of registrant as specified in its charter)

| **California** | **77-0015491** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |

**400 West California Avenue, Sunnyvale, CA 94086**

**(408) 749-1888**

(Registrant s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act: Not Applicable.

Securities registered pursuant to Section 12(g) of the Exchange Act: Common Stock, without par value

Indicate by a check whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter periods that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

| ü | |
|---|---|
| Yes | No |

Indicate by a check mark if disclosure by delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ X ]

Indicate by a check whether the registrant is an accelerated filer.

| ü | |
|---|---|
| Yes | No |

Aggregate market value of the voting stock held by non-affiliates of the registrant:
Common Stock, without par value $111,036,546 as of May 2, 2003, based on the closing price for the registrant s common stock reported by the NASDAQ National Market System. For purposes of this disclosure, shares of common stock held by persons who held more than 5% of the outstanding shares of common stock and shares held by officers and directors of the registrant have been excluded in that such persons may be deemed to be affiliates. The determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of registrant s common stock outstanding:
Common Stock, without par value 10,767,145 shares as of October 31, 2003.

## Documents Incorporated by Reference

The registrant has incorporated by reference into Part III of this Form 10-K portions of its proxy statement for the registrant s Annual Meeting of Shareholders to be held March 10, 2004.

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# Applied Signal Technology, Inc.

Part I

# Item 1: Business

This Annual Report on Form 10-K contains forward-looking statements made pursuant to the provisions of Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on management s current expectations and beliefs, including estimates and projections about our industry. Forward-looking statements may be identified by the use of terms such as "anticipates," "expects," "intends," "plans," "seeks," "estimates," "believes," and similar expressions, although some forward-looking statements are expressed differently. Statements concerning financial position, business strategy and plans or objectives for future operations are 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 and may cause actual results to differ materially from management s current expectations. Such risks and uncertainties include those set forth herein under "Summary of Business Considerations and Certain Factors that May Affect Future Operating Results and/or Stock Price" and "Management s Discussion and Analysis of Financial Condition and Results of Operations." The forward-looking statements in this report speak only as of the time they are made and do not necessarily reflect management s outlook at any other point in time. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or for any other reason. However, readers should carefully review the risk factors set forth in other reports or documents we file from time to time with the Securities and Exchange Commission (SEC) after the date of the Annual Report. These SEC filings, as well as our latest annual report, can be obtained through our website at www.appsig.com. In addition, hard copies can be obtained free of charge through our investor relations department.

## Description of the Business

Applied Signal Technology, Inc. provides advanced digital signal processing products, systems, and services used in reconnaissance of telecommunication signals for intelligence gathering, a process referred to as signal intelligence (SIGINT). Our primary customer is the United States Government. We develop and manufacture equipment for both the collection and processing of signals. Our signal collection equipment consists of sophisticated receivers that scan through potentially thousands of cellular telephone, microwave, ship-to-shore, and military transmissions in the radio frequency (RF) spectrum with the goal of collecting certain specific signals. Our signal processing equipment uses advanced software and hardware to evaluate characteristics of the collected signals and selects those most likely to contain relevant information. At inception in 1984, our efforts were primarily focused on processing equipment. Over time, we have broadened our scope to add specialized collection equipment and complete signal processing systems.

We were incorporated in California in 1984. Our principal executive offices are located at 400 West California Ave., Sunnyvale, CA, 94086, and our telephone number is (408) 749-1888. Our web site address is www.appsig.com. The information posted on our web site is not incorporated into this Annual Report. However, investors can obtain a copy of this Annual Report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports filed or furnished with the SEC on our web site free of charge.

## Signal Reconnaissance

Accurate and comprehensive information regarding foreign affairs and developments has become increasingly important to the United States Government. The political instability in certain regions such as the Middle East, Eastern Europe, Africa, and Central and South America and the ongoing counterterrorism campaign have heightened the

United States Government s need to be able to monitor activities in foreign countries. In order to obtain information about activities within foreign countries, the United States Government gathers and analyzes telecommunications signals emanating from those countries.

The ever-increasing commercial development of telecommunications equipment has led to a significant increase in the overall quantity of information communicated and an increase in the density of signals transmitted throughout the RF spectrum. This increase can be seen in the proliferation of facsimile, cellular, and digital signal telecommunications equipment and in the global information network (such as the Internet) in recent years, resulting in a significant increase in the amount of information being communicated. Consequently, the requirement to develop signal reconnaissance equipment capable of collecting and processing an increased quantity of signals, as well as new types of signals, has increased significantly.

We devote significant resources toward understanding the United States Government s signal reconnaissance goals, capabilities, and perceived future needs. We obtain information about these signal reconnaissance needs through frequent marketing contact between our employees and technical and contracting officials of the United States Government. In addition, we invest in research and development (R&D) activities that we anticipate will enable us to develop signal reconnaissance equipment that meets the future needs of the United States Government. We believe that we invest a greater percentage of our revenues in R&D than is typical among our competitors. (See "Research and Development" on page 9.)

Our signal reconnaissance products can be used, with or without further modification, to satisfy requirements of a variety of customers. Our products can be deployed readily in a wide variety of circumstances to meet current United States Government signal reconnaissance requirements.

The United States Government is beginning to provide increased funding for counterterrorism. Counterterrorism is focused on individuals and groups of individuals, and relies heavily on intelligence gathering. A key source for intelligence is SIGINT. SIGINT refers to all National Security information derived from interception and analysis of foreign instrumentation, communications, and electronic signals, many of which are protected by codes and other complex countermeasures. We believe we are a pre-eminent resource to the United States Government, providing SIGINT products, systems, and services.

## Strategy

Our objective is to anticipate the needs of the signal reconnaissance marketplace and to invest in research and development so we can provide solutions before our competitors. In some cases, our solution is to develop equipment or services that address new telecommunications technologies. In other cases, our solution is to develop equipment that offers smaller size, lower power consumption, and lower cost than potentially competitive products. Our strategy to accomplish these objectives focuses on the following elements:

***Anticipate marketplace needs.*** We devote significant resources in order to anticipate future telecommunications processing needs. We monitor technological and commercial advances in telecommunications to identify what we believe are new opportunities for the development of our products. We obtain information about marketplace needs through frequent contact with technical and contracting officials of pertinent government agencies within the intelligence community.

Many times, the United States Government grants sole-source contracts when a single contractor is deemed to have expertise or technology that is superior to that of competing contractors. Since our inception, a significant portion of our revenues has been from sole-source contracts. Although we believe that the large number of sole-source contracts we obtain demonstrates that we often correctly anticipate marketplace needs, we cannot be sure that we will continue to correctly anticipate the marketplace needs in the future.

***Invest in research and development.*** We invest in research and development that we believe will enable us to develop equipment and services that will satisfy the future signal reconnaissance needs of our customers. We believe that we

invest a greater percentage of our revenues in R&D than is typical among our competitors. This, in turn, often enables us to introduce products that meet marketplace demands before our competitors. An important aspect of our R&D efforts is the understanding of telecommunication trends in order to anticipate the future signal processing needs of our customers. Not only does this allow us to direct R&D engineering efforts to produce solutions promptly once a customer expresses a requirement, but it often allows us to educate the customer about potential requirements and simultaneously present a conceptual solution to those requirements.

***Develop flexible products.*** We develop products that can be used as originally designed, or with further customization, to satisfy the needs of a variety of customers. We use prior product development efforts to offer customers cost-effective solutions and to offer these solutions promptly.

***Develop highly integrated products.*** We design our products to use advanced circuitry and highly integrated components. This enables us to offer products that are smaller, consume less power, and cost customers less when multiple units are built than equipment of similar functionality that uses fewer advanced designs and materials. The lower cost of many of our products appeals to customers with budget constraints, and the small size and low power consumption of many of our products appeal to customers with physical installation constraints.

***Focus on signal processing.*** Since inception, we have focused our attention on developing signal processing equipment and services. We believe that there have been and will continue to be opportunities to develop specialized signal processing equipment and services to satisfy emerging technological requirements.

***Increase business with existing customers and broaden customer base.*** We believe that our current customers offer opportunities for sales growth through sales of additional units of developed products and through contracts to develop new products. Accordingly, we direct much of our marketing efforts toward these customers in order to increase our penetration of these markets. Additionally, we continue to try to broaden our customer base by increasing marketing efforts toward military signal reconnaissance and by evaluating law enforcement opportunities.

## Products

Our products consist of signal collection and processing equipment that uses software and hardware that we developed over many years. This software and hardware enables our processing equipment to evaluate large numbers of radio frequency signals and to select the relatively small proportion that contains information likely to be useful in the signal reconnaissance programs of the United States Government. We offer a variety of signal reconnaissance products that can be categorized as follows.

***Voice grade channel processors.*** These processors are designed to process voice grade channels (VGCs), which carry audio and other signals. The standard telecommunication systems used throughout the world put a large number of VGCs on a single carrier channel to increase the number of signals that can be transmitted at a particular frequency. Our VGC processors can scan thousands of signals in less than one second, evaluate their characteristics, and use sophisticated processing technology to detect and record relevant data that is then analyzed by United States Government personnel. Our VGC processors currently range in price from approximately $40,000 to approximately $200,000.

***Wideband processors.*** These processors "clean" telecommunication signals for further processing by VGC processors by adjusting for signal distortions that commonly occur during transmission. The two primary types of distortions that these processors correct are multipath interference (caused by the reception of a signal and its reflections) and co-channel interference (caused by the reception of multiple interfering signals). Commercial telecommunication companies overcome these distortions with careful alignment and tuning that requires interruption of the telecommunication signals. Our wideband processors perform this alignment independently and automatically by using proprietary adaptive algorithms that let the processors "learn" how to adjust their parameters to process the incoming signals. One of our wideband products processes signals that carry thousands of VGCs in a globally used

digital format that is particularly susceptible to distortions. Our wideband processors currently range in price from approximately $80,000 to approximately $150,000.

***Collection products.*** We offer a limited number of signal collection products designed to complement some of our processing products. Our collection products include a low-cost, small receiver that collects very complex signaling formats, and a receiver that optimizes multiple antenna inputs to overcome co-channel interference and certain forms of multi-path interference. Our collection products currently range in price from approximately $20,000 to approximately $60,000.

***Software Solutions.*** Software solutions are based upon the use of commercial off-the-shelf technologies. With current state-of-the-art computer and component technologies (for example, field-programmable gate arrays, Pentium processors, G4 processors), signal reconnaissance requirements can many times be met by utilizing off-the-shelf "compute engines." We develop our products so the signal processing can be performed in these engines when applicable. These solutions are then offered either as an open architecture signal reconnaissance product or as a software solution. Typical software licensing prices vary from $5,000 to $25,000 per license.

Systems

***Systems Development.*** We also develop and deliver entire SIGINT systems in situations where the capabilities of our products formulate the majority of the system capability. These systems include our custom developed system software, and the integration of the appropriate compilation of our products (VGC and wideband processors, collection) as well as, at times, the integration of other vendors products.

Pricing for processing systems can vary widely depending on systems requirements and may range from one to tens of millions of dollars.

***Systems Integration.*** In more recent years, we have applied our SIGINT expertise to integrate signal processing systems comprised mainly of other vendors products. These system integration efforts are usually performed at a customer s facility or SIGINT site (many times in foreign countries). These contracts may include the development of system software, the physical integration of other vendors products, and the final system testing to verify performance. These contracts many times include on-going maintenance and mission management efforts. These contracts can range from $500,000 to millions of dollars.

Services

Engineering services are performed for current operational SIGINT systems. Examples of these services are: 1) evaluation of current performance; 2) engineering improvements for performance enhancement; 3) evaluation of signals being processed to develop system operation techniques that can improve the intelligence gathering; 4) on-going mission management of a system; and 5) customer training in the usage of our standard products.

## Customers, Contracts, and Marketing

### Customers

Since our inception, purchases by the United States Government have accounted for almost all of our revenues. These purchases occur in two ways: contracts directly with the government, and subcontracts to prime contractors. Direct contracts with the United States Government accounted for approximately 59%, 61%, and 55% of revenues in fiscal years 2003, 2002, and 2001, respectively. The subcontracts under which we supply products or services to prime contractors that have contracts with the United States Government accounted for approximately 39%, 34%, and 38% of revenues in fiscal years 2003, 2002, and 2001, respectively.

Our United States Government customers consist of approximately six military and intelligence agencies that have signal reconnaissance needs. Within the six major customers, we have contracts with approximately 20 different offices, each with separate budgets and contracting authority. Our largest contract and its follow-on effort accounted for 19%, 11%, and 8% of revenues in fiscal years 2003, 2002, and 2001, respectively.

The following table identifies the source of our revenues for fiscal years 2003, 2002, and 2001 by major market.

| | FY03 | FY02 | FY01 |
|---|---|---|---|
| Intelligence Agencies | 84% | 76% | 74% |
| Military | 14% | 19% | 19% |
| Law Enforcement | 1% | | |
| Foreign | 1% | 3% | 4% |
| Commercial | | 2% | 3% |

Two intelligence agencies accounted for approximately 30% and 54% of revenues in fiscal year 2003; 33% and 43%, respectively, of revenues in fiscal year 2002; and approximately 39% and 35%, respectively, of revenues in fiscal year 2001.

One branch of the military accounted for 10%, 12%, and 6% of revenues for fiscal years 2003, 2002, and 2001, respectively.

## Contracts

Most of our business is conducted under contracts that include United States Government security requirements. Our contracts with United States Government agencies can be categorized in several ways.

Sole-source contracts are awarded by the United States Government when a single contractor is deemed to have an expertise or technology that is superior to that of competing contractors. Potential suppliers compete informally for sole-source contracts through R&D investment and marketing efforts. This competition requires a contractor to identify the United States Government s requirements early and invest in developing potential solutions so that the contractor can demonstrate a distinguishing expertise or technology promptly after the United States Government has identified a signal reconnaissance requirement. Sole-source contracts are awarded without a formal competition.

Competitive-bid contracts are awarded based on objective proposal evaluation criteria established by the procuring agency. Interested contractors prepare a bid and proposal in response to the agency s request. A bid and proposal is usually prepared in a short time period (for example, 45 days) in response to a deadline, and requires the extensive involvement of numerous technical and administrative personnel. Competitive-bid contracts are awarded after a formal bid and proposal competition among suppliers.

The following table identifies the allocation of revenues for fiscal years 2003, 2002, and 2001 between contracts awarded on a sole-source basis and contracts awarded on a competitive basis.

| | FY03 | FY02 | FY01 |
|---|---|---|---|
| Sole-Source Contracts | 81% | 91% | 81% |
| Competitive Contracts | 19% | 9% | 19% |

Sole-source or competitive-bid contracts can be either fixed-price contracts, where we agree to deliver equipment for a fixed price and we assume the risk of cost overruns, or they can be cost-reimbursement contracts, where we are reimbursed for our direct and indirect costs and paid a negotiated profit. Historically, we have achieved greater profit margins from our fixed-price contracts than from our cost-reimbursement contracts.

The following table identifies the source of revenues for fiscal years 2003, 2002, and 2001 by contract type:

| | FY03 | FY02 | FY01 |
|---|---|---|---|
| Cost-Reimbursement Contracts | 73% | 59% | 68% |
| Fixed-Price Contracts | 27% | 41% | 32% |

We believe that our mix of contract types in fiscal year 2004 will be similar to fiscal year 2003.

Most of our fixed-price contracts are for the manufacture of multiple units of our established products, rather than the development of new products. We believe that the risk of cost overruns is much less in the case of fixed-price manufacturing contracts, where the product has already been developed and at least a prototype made, than in the case of fixed-price development contracts.

We are subject to price redetermination on certain fixed-price United States Government contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal Acquisition Regulations. During fiscal years 2003, 2002, and 2001, we did not have a claim sustained against us for noncompliance with these regulations.

Almost all of our contracts contain termination clauses that permit contract termination upon our default or for the convenience of the other contracting party. In either case, terminations could adversely affect our operating results. Under contracts terminable at the convenience of the United States Government, a contractor is generally entitled to receive payments for its allowable costs and, in general, the proportionate share of fees or earnings for the work done. Contracts that are terminable for default generally provide that the United States Government only pays for the work it has accepted and may require the contractor to pay for the incremental cost of reprocurement and may hold the contractor liable for damages. During fiscal year 2001, we received unanticipated contract closeout notifications on three significant engineering development contracts for the convenience of the other contracting party. These closeouts contributed, in part, to our need to reduce our cost structure during fiscal year 2001. There were no such notifications in fiscal year 2002 or 2003.

## Marketing

Our primary marketing efforts consist of personal contact between our technical personnel and technical representatives of existing and potential customers. We involve all technically qualified staff members in our marketing program. We believe that it is extremely important to have technically knowledgeable staff make marketing contacts since an initial system concept is often developed during the first marketing contact.

In addition to our primary technical marketing, we also conduct marketing activities designed to increase our visibility with existing and potential customers. Each year we conduct equipment shows in the Washington, D.C. area, demonstrating the operation of many of our signal reconnaissance products. Additionally, we use direct mail and magazine advertising from time to time to inform potential customers of available products. We also produce a signal reconnaissance product summary catalog and a quarterly technical newsletter for direct mailing.

## Backlog

Our backlog, which consists of anticipated revenues from the uncompleted portions of existing contracts, was $87,074,000, $42,298,000, and $32,085,000, at October 31, 2003, 2002, and 2001, respectively. Anticipated revenues included in backlog may be realized over a multi-year period. We include a contract in backlog when the contract is signed by us and by our customer. We believe the backlog figures are firm, subject only to the cancellation and modification provisions contained in our contracts. (See Item 7: "Management s Discussion and Analysis of Financial Condition and Results of Operations Backlog.") Because of possible future changes in delivery schedules and cancellations of orders, backlog at any particular date is not necessarily representative of actual sales to be expected for any succeeding period, and actual sales for the year may not meet or exceed the backlog represented. We may experience significant contract cancellations that were previously booked and included in backlog.

## Research and Development

We conduct R&D pursuant to United States Government R&D contracts and as part of our own R&D investment. We believe that our investment in R&D provides us with a significant competitive advantage. Research and development expenses incurred by us were approximately $7,526,000, $8,798,000 and $17,122,000 in fiscal years 2003, 2002, and 2001, respectively. As a percent of revenue, R&D equated to 7.9%, 11.6%, and 23.3% in fiscal years 2003, 2002, and 2001 respectively. Although our spending has declined in recent years, we believe our R&D investment, as a percentage of revenue, is still greater than that of our competitors.

In fiscal year 2003, our R&D program was funded entirely by the billing rates charged to our customers. In fiscal years 2002 and 2001, a portion of our R&D costs was funded by our own investment, which was not reimbursed by our customers.

We seek to develop technology capable of addressing new telecommunications signal processing requirements before our competitors. In addition, we focus R&D on developing products and services that can be used, with or without further modification, to satisfy various needs of a variety of customers, thereby permitting us to offer a solution promptly. We attempt to allocate R&D funds to research intended to yield revenues within one to two years and research intended to yield revenues in two to five years. Most of our R&D expenditures are for projects intended to yield revenues within one to two years.

## Company Divisions

Applied Signal Technology, Inc. is organized into a Technical Operations Group and a Finance Division. The Technical Operations Group has three divisions. Two of these divisions Wireless Communications Systems Division and Multichannel Systems Division are engineering divisions that are primarily responsible for conducting all R&D activities as well as the initial development of products. The third division is the Operations Division that is primarily responsible for manufacturing multiple units of products. All of the divisions work together to ensure that production-related issues such as manufacturability, reliability, and maintainability are addressed from initial product definition through final product shipment. As of January 2, 2004, there were 258 employees in the engineering divisions and 63 employees in the Operations Division. (See "Employees" on page 12.)

## Engineering

The engineering divisions are responsible for all of our R&D activities. Our R&D activities include both United States Government development contracts and our own R&D projects. The activities of the engineering division are directed toward developing products that will ultimately be produced by the Operations Division, and solutions that will be sold as software licenses or open architecture equipment. The engineering divisions work in conjunction with the Operations Division to assure that the product development efforts will culminate in a product that can be manufactured efficiently in quantity.

In addition to corporate headquarters in Sunnyvale, California, we maintain engineering offices in Herndon, Virginia; Annapolis Junction, Maryland; Salt Lake City, Utah; and Hillsboro, Oregon. As of January 2, 2004, there was a total of 82 employees in these locations. Most are technical personnel and, in addition to marketing activities, they are involved in R&D and customer support such as installation, training, and troubleshooting.

## Operations

The Operations Division is responsible for manufacturing multiple units of products. By combining engineering and production expertise within the Operations Division, we are able to maximize manufacturing efficiency and, therefore, reduce overall production costs. The Operations Division uses batch production methods to manufacture products. The division s extensive cross-training of personnel enables workers to participate in the production of all products and this achieves labor efficiency. The division is also responsible for managing purchases of goods and services, including third-party manufacturing and assembly services.

## Competition

The signal reconnaissance market is highly competitive and we expect that competition will increase in the future. Some of our current and potential competitors have significantly greater technical, manufacturing, financial, and marketing resources than we do. Our current competitors include L-3 Communications Corporation, Boeing-North America, Raytheon Corporation, General Dynamics Corporation, Harris Corporation, Lockheed Martin Corporation, and Northrop Grumman, Inc. Substantial competition could impose pricing pressure on sales of our products, enable competition to develop and introduce new products meeting market demand more quickly than we can, and result in lower revenue and decreased sales, which would have a materially adverse effect on our financial condition and operating results.

The competition for competitive-bid contracts differs from the competition for sole-source contracts. Companies competing for competitive-bid contracts prepare bids and proposals in response to either commercial or government requests and typically compete on price. Potential suppliers compete informally for sole-source contracts through R&D investment and marketing efforts. Companies competing for sole-source contracts attempt to identify the customer s requirements early and invest in solutions so that they can demonstrate a distinguishing expertise or technology promptly after the customer has identified a signal processing requirement. The principal factors of competition for sole-source contracts include: investments in R&D; the ability to respond promptly to government needs; and product price relative to performance, quality, and customer support. We believe that we compete favorably on each of these factors.

## Proprietary Rights

The United States Government has rights to most of the technology that we have developed under government contracts, including rights to permit other companies, including our competitors, to use this technology to develop products for the United States Government. We are not aware that the United States Government has exercised these rights related to our products.

We have filed patent applications for certain technologies that we developed. As of October 31, 2003, we had two issued patents and one patent application pending. We believe that, given the rapidly changing nature of signal collection and processing technology, our future success will depend primarily upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through agreements with customers, employees, and consultants, and through other security measures. To the extent we wish to assert our patent rights, we cannot be sure that any claims of our patents will be sufficiently broad to protect our technology or that our pending patent application will be approved. In addition, there can be no assurance that any patents issued to us will not be challenged, invalidated, or circumvented; that any rights granted under these patents will provide us adequate protection; or that there will be sufficient resources to protect and enforce our rights. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States. Although we do not believe that we are infringing upon the intellectual property rights of others, it is possible that such a claim will be asserted against us in the future. In the event any third party makes a claim against us for infringement of patents or other intellectual property rights of a third party, such claims, with or without merit, could be time-consuming and result in costly litigation. In addition, we could experience loss or cancellation of customer orders, product shipment delays, or could subject us to significant liabilities to third parties. If our products were found to infringe a third party s proprietary rights, we could be required to enter into royalty or licensing agreements to continue selling our products. Royalty or licensing agreements, if required, may not be available under acceptable terms or at all, which could seriously harm our business. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets and expertise could have a material adverse effect on our business.

## Government Regulations

Many of our operations are subject to compliance with regulatory requirements of federal, state, and municipal authorities, including regulations concerning employment obligations and affirmative action, workplace safety, and protection of the environment. Most importantly, we must comply with detailed government procurement and contracting regulations and with United States Government security regulations, certain of which carry substantial penalties for nonperformance or misrepresentation in the course of negotiations. Failure to comply with our government procurement or contracting obligations or security obligations could result in penalties imposed against us or suspension from government contracting, which would prevent us from selling our products to the United States Government, severely limiting our ability to operate our business and generate revenue, resulting in a material adverse effect on our financial condition and operating results. (See Item 1: "Business Customers, Contracts, and Marketing" on page 7 .)

While compliance with applicable regulations has not adversely affected our operations in the past, we cannot be sure that we will continue to be in compliance in the future or that these regulations will not change, resulting in increased operational costs.

## Employees

As of January 2, 2004, we had 425 employees. Our business requires that a large number of our technical employees obtain security clearances from the United States Government, which limits the available pool of eligible candidates for such positions to those who can satisfy the prerequisites to obtaining these clearances. In particular, the personnel involved in signal reconnaissance marketing require the appropriate clearances to meet with government technical representatives and discuss the government s needs. We have a United States Government-sanctioned security program that allows staff members to obtain appropriate clearances. Approximately 68% of our staff has security clearances. Our success is dependent on attracting, retaining, and motivating qualified key management and technical personnel, the loss of whom could adversely affect our business materially.

## Summary of Business Considerations and Certain Factors that May Affect Future Operating Results and/or Stock Price

Our future performance is subject to a variety of risks. If any of the following risks actually occurs, our business could be harmed and the trading price of our common stock could decline. In addition to the following disclosures, please refer to the other information contained in this report, including consolidated financial statements and the related notes.

***Any reduction in government spending on signal reconnaissance could materially adversely impact our revenues, results of operations, and financial condition materially.*** Historically, defense and intelligence agencies of the United States Government have accounted for almost all of our revenues. There are risks associated with programs that are subject to appropriation by Congress, which could be potential targets for reductions in funding to pay for other programs. Future reductions in United States Government spending on signal reconnaissance or future changes in the kind of signal reconnaissance products or services required by the United States Government agencies could limit demand for our products and services, which would have a material adverse effect on our operating results and financial condition.

Also, potential shifts in responsibilities and functions within the defense and intelligence communities could result in a reduction of orders for signal reconnaissance by the defense and intelligence agencies that have historically been our major customers. We believe that the United States Government may compensate for reduced order flow by these agencies with increases in spending for signal reconnaissance by other Government agencies. However, our relationships with other Government agencies are not as strong as our relationships with current customer agencies. A reduction in contracts from our customer agencies may not be offset by contracts from other United States Government agencies. Even if other agencies increase spending for signal reconnaissance, we may not secure the same amount of work from such other agencies. As a result, demand for our products and services could decline, resulting in a decrease in revenues, and could adversely affect our operating results and financial condition materially.

***If we are unable to comply with complex government regulations governing security and contracting practices, we could be disqualified as a supplier to the United States Government.*** As a supplier to United States Government defense and intelligence agencies, we must comply with numerous regulations, including those governing security and contracting practices. Failure to comply with these procurement regulations and practices could result in fines being imposed against us or our suspension for a period of time from eligibility for bidding on, or for award of, new government contracts. If we are disqualified as a supplier to government agencies, we will lose most, if not all, of our customers, revenues from sales of our products would decline significantly, and our ability to continue operations would be seriously jeopardized. Among the causes for disqualification are violations of various statutes, including those related to procurement integrity, export control, U.S. Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corruption. The government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting. Depending on the results of these audits and investigations, the government may make claims against us.

***We depend on revenues from a few significant contracts, and any loss, cancellation, reduction, or delay in these contracts could harm our business.*** From time to time, including recent periods, we have derived a material portion of our revenue from one or more individual contracts that could be terminated by the customer at the customer s discretion. We expect that in future periods we may again enter into individual contracts with significant revenue concentrations. If such contracts were terminated, revenues and net income would significantly decline. Our success will depend on our continued ability to develop and manage relationships with significant customers. Although we are attempting to expand our customer base, we expect that our customer concentration will not change significantly in the near future. The markets in which we sell our products are dominated by a relatively small number of governmental agencies and allies of the United States Government, thereby limiting the number of potential customers. Our dependence on large orders from a relatively small number of customers makes our relationship with each customer critical to our business. We cannot be sure that we will be able to retain our largest customers, that we will be able to attract additional customers, or that our customers will continue to buy our products in the same amounts as in prior years. The loss of one or more of our largest customers, any reduction or delay in sales to these customers, our inability to successfully develop relationships with additional customers, or future price concessions that we may have to make could significantly harm our business.

***Continued competition in our markets may lead to a reduction in our revenues and market share.*** The signal reconnaissance market is highly competitive and we expect that competition will increase in the future. Our current competitors have significantly greater technical, manufacturing, financial, and marketing resources than we do. We expect that more companies will enter the market for SIGINT. We may not be able to compete successfully against either current or future competitors. Increased competition could result in reduced revenue, lower margins, or loss of market share, any of which could significantly harm our business. Our competitors may introduce improved products with lower prices, and we will have to do the same to remain competitive.

***If we are unable to recruit, train, and retain key personnel, our ability to develop, introduce, and sell our products may be adversely impacted.*** Our ability to execute our business plan is contingent upon successfully attracting and retaining qualified employees. Management believes that there has been a change in the local California economy where we must compete for talent in the telecommunications sector. In California, it has not been as difficult to recruit new staff capable of obtaining the necessary security clearances in fiscal years 2003 and 2002 as in prior years. (See "Employees" on page 12.) If we fail to attract and retain qualified employees who can obtain the necessary security clearances, our business could be significantly harmed. The loss of the services of any of our qualified employees, the inability to attract or retain qualified personnel in the future, or delays in hiring required personnel could negatively impact our ability to develop, introduce, and sell our products. In addition, employees may leave us and subsequently compete against us.

***Unexpected increases in the cost to develop or manufacture our products under fixed-price contracts may cause us to experience unreimbursed cost overruns.*** A significant portion of our revenue is derived from fixed-price contracts. Under fixed-price contracts, unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in materials costs, inefficiencies, or other factors, are borne by us. We have experienced cost overruns in the past that have resulted in losses on certain contracts, and may experience additional cost overruns in the future. Such cost overruns would increase our operating expenses, reduce our net income and earnings per share, and have a materially adverse effect on our future results of operations and financial condition.

***Unexpected contract terminations could negatively impact our operating results and financial condition.*** Almost all of our contracts contain termination clauses that permit contract termination upon our default or for the convenience of the other contracting party. In either case, termination could adversely affect our operating results and financial condition. For example, in fiscal year 2001, we received unanticipated contract closeout notifications on three

significant engineering contracts for the convenience of the other contracting party. These closeouts contributed, in part, to our need to reduce our cost structure during fiscal year 2001. There were no such notifications in fiscal years 2002 and 2003. There can be no assurance that such terminations will not occur in the future.

***Our future revenues are inherently unpredictable, our operating results are likely to fluctuate from period to period, and if we fail to meet the expectations of securities analysts or investors, our stock price could decline significantly.*** Our quarterly and annual operating results have fluctuated in the past and are likely to fluctuate significantly in the future due to a variety of factors, some of which are outside our control. Accordingly, we believe that period-to-period comparisons of our results of operations are not meaningful and should not be relied upon as indications of future performance. Some of the factors that could cause our quarterly or annual operating results to fluctuate include conditions inherent in government contracting and our business such as the timing of cost and expense recognition for contracts, the United States Government contracting and budget cycles, and contract closeouts. Because we base our operating expenses on anticipated revenue trends and a high percentage of our expenses are fixed in the short term, any delay in generating or recognizing forecasted revenues could significantly harm our business. Fluctuations in quarterly results, competition, or announcements of extraordinary events such as acquisitions or litigation may cause revenues to fall below the expectations of securities analysts and investors. In this event, the trading price of our common stock would significantly decline. In addition, there can be no assurance that an active trading market will be sustained for our common stock. The stock market in recent years has experienced extreme price and volume fluctuations that have particularly affected the market prices of many technology companies. These fluctuations, as well as general economic and market conditions, may adversely affect the future market price of our common stock.

***Our market is subject to rapid technological change, and to compete effectively, we must continually introduce new products or enhancements that achieve market acceptance.*** The market for our products is characterized by rapidly changing technology, frequent new product introductions, changes in customer requirements, and evolving industry standards. We believe that we have been successful to date in identifying certain signal reconnaissance needs early, investing in research and development to meet these needs, and delivering products before our competitors. We believe that our future success will depend upon continued development and timely introduction of products capable of collecting or processing new types of telecommunications signals. However, we expect that new technologies will continue to emerge. Our future performance will depend on the successful development, introduction, and market acceptance of new and enhanced products that address these changes as well as current and potential customer requirements. The introduction of new and enhanced products may cause our customers to defer or cancel orders for existing products. There can be no assurance that we will be able to develop and market new products successfully in the future or respond effectively to technological changes, such as data encryption technology and others, or that new products introduced by others will not render our products or technologies noncompetitive or obsolete.

We also may not be able to develop the underlying core technologies necessary to create new products and enhancements or to license these technologies from third parties. Product development delays may result from numerous factors, including:

- Changing product specifications and customer requirements
- Difficulties in hiring and retaining necessary technical personnel
- Difficulties in reallocating engineering resources and overcoming resource limitations
- Difficulties with contract manufacturers
- Changing market or competitive product requirements
- Unanticipated engineering complexities

The development of new, technologically advanced products is a complex and uncertain process requiring high levels of innovation and highly skilled engineering and development personnel, as well as the accurate anticipation of technological and market trends. We cannot ensure that we will be able to identify, develop, manufacture, market, or support new or enhanced products successfully, if at all, or on a timely basis. Further, we cannot ensure that our new products will gain market acceptance or that we will be able to respond effectively to product announcements by competitors, technological changes, or emerging industry standards. Any failure to respond to technological change would significantly harm our business.

***We may lose sales if our suppliers fail to meet our needs.*** Although we procure most of our parts and components from multiple sources or believe that these components are readily available from numerous other sources, certain components are available only from sole sources or from a limited number of sources. While we believe that substitute components or assemblies could be obtained, use of substitutes would require development of new suppliers or would require us to re-engineer our products, or both, which could delay shipment of our products and could

have a material adverse effect on our operating results and financial condition.

***Our headquarters and most of our manufacturing operations are located in California where natural disasters may occur, resulting in disruption to our business.*** Our corporate headquarters, including most of our research and development operations and production facilities, are located in the Silicon Valley area of Northern California, a region known for being vulnerable to natural disasters and other risks, such as earthquakes, fires, and floods, which at times have disrupted the local economy and posed physical risks to our property. A significant earthquake could materially affect operating results. We are not insured for most losses and business interruptions of this kind, and do not presently have redundant, multiple site capacity in the event of a natural disaster. In the event of such disaster, our business would suffer.

***Delays in the receipt of engineering contracts could negatively impact our business.*** During our history, we have experienced delays in the receipt of certain engineering development contracts. While we work closely with our customers to try to capture what we believe to be sole-source orders, delays in the receipt of such orders could result in revenues falling short of estimates. In addition, gross margins and net income will decrease if we elect to hold our cost structure in place while awaiting the award of delayed contracts.

***Our failure to protect our intellectual property may significantly harm our business.*** Our success and ability to compete is dependent in part on our proprietary technology. We rely on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality agreements to establish and protect our proprietary rights. We license certain of our proprietary technology to customers, and we rely largely on provisions of our licensing agreements to protect our intellectual property rights in this technology. To date, we have relied primarily on proprietary processes and know-how to protect our intellectual property. Although we have filed applications for several patents, two of which we currently hold, we cannot ensure that any patents will be issued as a result of pending patent applications or that our issued patents will be upheld. Any infringement of our proprietary rights could result in significant litigation costs, and any failure to adequately protect our proprietary rights could result in our competitors offering similar products, potentially resulting in loss of a competitive advantage and decreased revenues. Despite our efforts to protect our proprietary rights, existing patent, copyright, trademark, and trade secret laws afford only limited protection. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Attempts may be made to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary. Accordingly, we may not be able to prevent misappropriation of our technology or deter others from developing similar technology. Furthermore, policing the unauthorized use of our products is difficult. 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. This litigation could result in substantial costs and diversion of resources, and could significantly harm our business.

***Claims that we infringe third-party intellectual property rights could result in significant expenses or restrictions on our ability to sell our products.*** It is possible that from time to time, other parties may assert patent, copyright, trademark, and other intellectual property rights to technologies and in various jurisdictions that are important to our business. Any claims asserting that our products infringe or may infringe proprietary rights of third parties, if determined adverse to us, could significantly harm our business. Any claims, with or without merit, could result in costly litigation, divert the efforts of our technical and management personnel, cause product shipment delays, or require us to enter into royalty or licensing agreements, any of which could significantly harm our business. Royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all. In addition, our agreements with our customers typically require us to indemnify our customers from any expense or liability resulting from claimed infringement of third party intellectual property rights. In the event a claim against us was successful and we could not obtain a license to the relevant technology on acceptable terms, license a substitute technology, or redesign our products to avoid infringement, our business would be significantly harmed.

## Item 2: Properties

Our corporate offices, located in Sunnyvale, California, also serve as our primary research and development, engineering, production, marketing, and administrative center. As of October 31, 2003, we leased five buildings totaling approximately 266,077 square feet under a lease that expires in March 2012.

In addition, we maintain four offices within the United States for small development, marketing, and administrative functions. We lease the following properties: 29,121 square feet of a 90,000-square-foot building in Annapolis Junction, Maryland (lease expires April 2004); 15,520 square feet of a 104,922-square-foot building in Herndon, Virginia (lease expires January 2006); 11,000 square feet of a 40,000-square-foot building in Hillsboro, Oregon (lease expires October 2004); and 14,476 square feet of a 23,300-square-foot building in Salt Lake City, Utah (lease expires April 2004).

Our business requires that we maintain a facility clearance, sponsored and approved by the United States Government, at each of our offices. This approval could be suspended or revoked if we are found not to have complied with security regulations applicable to such facilities. Any revocation or suspension of such approval that materially delayed delivery of our products to customers would materially adversely impact our ability to manufacture and sell our products and operate our business. Although we have adopted policies directed at assuring our compliance with relevant regulations, there can be no assurance that the approved status of our facilities will continue without interruption.

## Item 3: Legal Proceedings

We are subject to litigation, from time to time, in the ordinary course of business including, but not limited to, allegations of wrongful termination or discrimination or governmental agency investigations. Although the amount of any liability with respect to such litigation cannot currently be determined, we are not party to any pending legal proceedings, which, in the opinion of management, are material to our business or financial condition. As a government contractor, we may also be subject to investigations by the United States Government for alleged violations of procurement or other federal laws. Under present government procurement regulations, if judged in violation of procurement or other federal civil laws, we could be suspended or barred from eligibility for awards of new government contracts.

## Item 4: Submission of Matters to a Vote of Security Holders

There were no matters submitted to a vote of security holders during the fourth quarter of the fiscal year.

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Part II

## Item 5: Market for Registrant  s Common Equity and Related Shareholder Matters

### Selected Common Stock Data

Our common stock was first offered to the public on March 26, 1993. Since the initial public offering, the stock has been traded on the NASDAQ National Market under the symbol "APSG." As of January 2, 2004 we had approximately 367 shareholders of record. The following table sets forth the range of high, low, and last sale prices for our common stock over the eight quarters ending October 31, 2003. The "last" price per share in the table represents the closing price on the last trading day of the quarter. The quotations represent inter-dealer quotations, without retail markups, markdowns, or commissions, and may not necessarily represent actual transactions.

| | High | Low | Last | Share Volume in 000s |
|---|---|---|---|---|
| **Fiscal Year ended October 31, 2002** | | | | |
| First quarter | $12.34 | $7.00 | $10.01 | 4,260.6 |

| | | | | |
|---|---|---|---|---|
| Second quarter | $10.50 | $8.33 | $9.45 | 1,729.0 |
| Third quarter | $12.80 | $9.02 | $10.25 | 4,201.4 |
| Fourth quarter | $11.51 | $7.41 | $9.01 | 2,304.0 |
| | | | | |
| **Fiscal Year ended October 31, 2003** | | | | |
| First quarter | $12.12 | $8.45 | $11.50 | 2,639.7 |
| Second quarter | $14.94 | $11.19 | $12.47 | 5,109.2 |
| Third quarter | $19.63 | $11.58 | $18.24 | 7,662.0 |
| Fourth quarter | $22.41 | $17.15 | $20.70 | 4,437.0 |

In the second quarter of fiscal year 2003, the Board of Directors announced a $0.25 per share annual dividend, payable over four quarters at the rate of $0.0625 per share per quarter. Dividends of approximately $646,000, $668,000, and $673,000 were paid on May 16, 2003, August 15, 2003, and November 14, 2003, respectively, to shareholders of record at May 2, 2003, August 1, 2003, and October 31, 2003, respectively.

In November 2003, the Board of Directors increased the annual dividend to $0.50 per share, payable over four quarters at the rate of $0.125 per share per quarter. Dividends will be payable February 13, 2004, May 14, 2004, August 13, 2004, and November 12, 2004 to shareholders of record at January 30, 2004, April 30, 2004, July 30, 2004, and October 31, 2004, respectively, and on such future dates that the Board of Directors may determine.

We paid no dividends during fiscal year 2002, and approximately $1,733,000 during fiscal year 2001.

The payment of dividends and the amount thereof will depend on a number of factors, including our financial condition, capital requirements, results of operations, future business prospects, and other factors that our Board of Directors may deem relevant.

### Equity Compensation Plan Information

The equity compensation plan information required to be provided in this Annual Report on Form 10-K is incorporated by reference to our proxy statement for the 2004 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days after the end of fiscal year ended October 31, 2003.

## Item 6: Selected Consolidated Financial Data

(In thousands, except per share data)

| Summary of Operations: | Year Ended October 31, | | | | |
|---|---|---|---|---|---|
| | 2003 | 2002 | 2001 | 2000 | 1999 |
| Revenues from contracts | $95,384 | $76,184 | $73,489 | $104,595 | $115,541 |
| Operating expenses: | | | | | |
| Contract costs | 63,335 | 49,067 | 52,199 | 64,000 | 70,109 |
| Research and development | 7,526 | 8,798 | 17,122 | 16,970 | 12,913 |
| General and administrative | 15,337 | 15,160 | 20,451 | 20,055 | 17,245 |
| Restructuring costs | | | 2,689 | | |
| | --- | --- | --- | --- | --- |

| | | | | | |
|---|---|---|---|---|---|
| Total operating expenses | 86,198 | 73,025 | 92,461 | 101,025 | 100,267 |
| Operating income (loss) | 9,186 | 3,159 | (18,972) | 3,570 | 15,274 |
| Interest income (expense), net | 510 | 34 | 435 | 1,084 | 672 |
| Income (loss) before provision (benefit) for income taxes | 9,696 | 3,193 | (18,537) | 4,654 | 15,946 |
| Provision (benefit) for income taxes | 1,031 | (728) | (6,154) | 977 | 6,059 |
| Net income (loss) | $8,665 | $3,921 | ($12,383) | $3,677 | $9,887 |
| Cash dividends declared per common share | $0.1875 | | $0.125 | $0.25 | $0.125 |
| Net income (loss) per common share: | | | | | |
| Basic | $0.83 | $0.40 | ($1.31) | $0.42 | $1.17 |
| Diluted | $0.80 | $0.39 | ($1.31) | $0.41 | $1.14 |
| Number of shares used in calculating net income (loss) per common share: | | | | | |
| Basic | 10,459 | 9,889 | 9,417 | 8,802 | 8,433 |
| Diluted | 10,863 | 10,061 | 9,417 | 9,041 | 8,696 |

| Financial Position at End of Fiscal Year: | Year Ended October 31, | | | | |
|---|---|---|---|---|---|
| | 2003 | 2002 | 2001 | 2000 | 1999 |
| Working capital | $63,555 | $50,191 | $41,207 | $48,258 | $45,009 |
| Total assets | 89,947 | 73,824 | 66,642 | 85,149 | 84,034 |
| Retained earnings | 45,021 | 38,343 | 34,422 | 47,968 | 46,504 |
| Shareholders equity | 76,218 | 64,973 | 59,317 | 70,757 | 64,433 |

## Item 7: Management s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion contains forward-looking statements that involve risks and uncertainties. Actual results could differ substantially from those anticipated in these forward-looking statements as a result of many factors, including those set forth under "Summary of Business Considerations and Certain Factors that May Affect Future Operating Results and/or Stock Price" on page 12.

### Overview

Applied Signal Technology, Inc. provides advanced digital signal processing products, systems, and services used in reconnaissance of telecommunications signals for intelligence gathering, a process referred to as signal intelligence. Our primary customer is the United States Government.

Signal reconnaissance systems are comprised of collection and processing equipment. Signal collection equipment consists of sophisticated receivers that scan through potentially thousands of cellular telephone, microwave, ship-to-shore, and military transmissions in the radio frequency (RF) spectrum with the goal of collecting certain specific signals. Our signal processing equipment uses advanced software and hardware to evaluate characteristics of the collected signals and selects those most likely to contain relevant information.

At inception in 1984, we focused our efforts primarily on processing equipment. Over time, we have broadened our scope to add specialized collection equipment and complete signal processing systems. Our revenues are primarily generated from sales of our products and services to two agencies of the United States Government.

Our contracts can be divided into two major types: firm fixed price and cost reimbursement. Firm-fixed-price contracts are typically characterized by negotiated prices for efforts that involve little or no development risk. Cost risks associated with building and delivering products under fixed-price contracts are borne solely by the contractor.

Cost-reimbursement types of contracts are characterized by negotiated target costs and fees, and are generally associated with engineering development work where there is a high degree of risk and uncertainty. Although risks associated with cost-reimbursement contracts are borne by the customer, we cannot exceed contract ceilings without the approval of our customer.

The following table represents the revenue concentration by contract type:

| | FY03 | FY02 | FY01 |
|---|---|---|---|
| Cost-Reimbursement Contracts | 73% | 59% | 68% |
| Fixed-Price Contracts | 27% | 41% | 32% |

Based on our ending backlog for fiscal year 2003, we believe that the mix of contract types in fiscal year 2004 will be similar to fiscal year 2003.

Cost-reimbursement contracts can include fixed fees, incentive fees, or award fees. In the case of cost-plus-fixed-fee contracts, the fee dollars are negotiated and fixed at the inception of the contract. Cost-plus-incentive-fee contracts include a negotiated fee that may be adjusted during the performance of the contract by a formula based on the relationship of total allowable costs to total target costs. Cost-plus-award-fee contracts can include fees consisting of a base amount that is fixed at the inception of the contract and an award amount that is earned in whole or in part during the performance of the contract based upon the evaluation of the customer.

In fiscal year 2003, we experienced significant revenue growth, which we believe was a result of increased spending by the U.S. Government on signal intelligence solutions. We believe the U.S. Government s emphasis on protecting U.S. citizens, due to the current world state of affairs, has created a renewed emphasis upon signal intelligence gathering.

## Critical Accounting Policies and Estimates

***General.*** Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements. These financial statements are prepared in accordance with accounting principles generally accepted in the United States, which require management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ significantly from those estimates. We believe that the estimates, assumptions, and judgments involved in the accounting policies described below have the greatest potential impact on our financial statements and, therefore, consider these to be critical accounting policies. See Note 1 to consolidated financial statements included elsewhere in this report for more information about these critical accounting policies, as well as descriptions of other significant accounting policies.

***Revenue and cost recognition.*** The majority of our contracts, which are with the U.S. Government, are accounted for in accordance with the American Institute of Certified Public Accountants Statement of Opinion 81-1, *Accounting for Performance of Construction-Type and Production-Type Contracts.* These contracts are transacted using written

contractual arrangements, most of which require us to design, develop, manufacture and/or modify our complex products, and perform related services according to specifications provided by the customer. We account for fixed-price contracts by using the percentage-of-completion method of accounting. Under this method, contract costs are charged to operations as incurred. A portion of the contract revenue, based on estimated profits and the degree of completion of the contract as measured by a comparison of the actual and estimated costs, is recognized as revenue each period. We account for cost-reimbursement contracts by charging contract costs to operations as incurred and recognizing contract revenues and profits by applying an estimated fee rate to actual costs on an individual contract basis. For those contracts in which all of the terms have not yet been finalized, revenue does not include an estimated fee rate on cost. Management reviews contract performance, costs incurred, and estimated completion costs regularly and adjusts revenues and profits on contracts in the period in which changes become determinable.

Our engineering services contracts are typically performed on a level-of-effort basis. Revenue is calculated in accordance with our policy regarding cost-reimbursement contracts; specifically, revenue is based on a fee percentage applied to the costs incurred on these contracts.

Anticipated losses on cost-reimbursement and fixed-price contracts are also recorded in the period in which they become determinable. Unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in material costs, inefficiencies, or other factors are borne by us on fixed-price contracts, and could have a material adverse effect on results of operations and financial condition. Unexpected cost increases in cost-reimbursement contracts may be borne by us for purposes of maintaining customer relationships. Historically, the effect on operating results and financial condition from cost-reimbursement losses has been minimal.

***Award fee recognition.*** Our policy for recognizing interim fee on our cost-plus-award-fee contracts is based on management s assessment as to the likelihood that the award fee or an incremental portion of the award fee will be earned on a contract-by-contract basis. Management s assessments are based on numerous factors including: contract terms, nature of the work to be performed, our relationship and history with the customer, our history with similar types of projects, and our current and anticipated performance on the specific contract. No award fee is recognized until management determines that it is probable that an award fee or a portion thereof will be earned. Actual fees awarded are typically within management s estimates. However, changes could arise within an award fee period causing management to either lower or raise the award fee estimate in the period in which it occurs.

***Indirect rate variance.*** We record contract revenues and costs for interim reporting purposes based on annual targeted indirect rates. At year-end, the revenues and costs are adjusted for actual indirect rates. During the interim reporting periods, variances may accumulate between the actual indirect rates and the annual targeted rates. All timing-related indirect spending variances are inventoried as part of work in process during these interim reporting periods. These rates are reviewed regularly, and we record reserves for any permanent variances in the period they become known. We have determined that this estimate is the preferred practice used within our industry.

Our accounting policy is based on management s belief that such interim variances, if deemed recoverable, will be absorbed by expected contract activities during the remainder of the year. If contract activities do not reach planned levels, there are alternatives we may utilize to absorb the variance: we can adjust some of our planned indirect spending during the year, modify our billing rates to our customers, or record adjustments to expense based on reduced estimates of future contract activities.

At the end of fiscal year 2003, there was a charge to profit of $1,107,000 for a bonus payment to our employees that was not recovered in our billing rates to our customers.

At certain points during fiscal year 2002, we determined that a portion of the indirect expenses would not be absorbed by expected contract activities. As a result, we recorded a charge to profit of approximately $1,198,000, $1,341,000, and $846,000 during the second, third, and fourth quarters, respectively. These additional charges reflect a total of

approximately $3,385,000 in indirect expenses that was excluded from our indirect billing rates in fiscal year 2002. In fiscal year 2001, the charge to profit for unabsorbed indirect expenses was approximately $10,101,000.

***Income taxes.*** Our income tax expense at interim reporting periods is based on an estimated effective tax rate. This estimated tax rate is calculated based on the projected net income at the end of the fiscal year, and is reviewed at each reporting period. At the end of the fiscal year, income tax expense is adjusted for actual results. Our effective tax rate can differ from the statutory rate. Historically, the variance from the statutory rate has been mainly due to expected benefits from R&D credits and the reversals of valuation allowances.

## Operating Results  Fiscal Years Comparison

The following table sets forth, for the periods indicated, statements of operations data as a percentage of revenues from contracts, and, at the end of each period indicated, our backlog:

| | Year Ended October 31, | |
|---|---|---|
| | **2003** | 2002 |