APPLIED SIGNAL TECHNOLOGY INC
Form 10-Q
June 07, 2010

Securities and Exchange Commission
Washington, D.C. 20549

Form 10-Q
(Mark One)

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

For the Period Ended April 30, 2010

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
(Address of principal executive offices)

(408) 749-1888
(Registrant's telephone number, including area code)

Indicate by checkmark 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 twelve 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 check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

	Yes	**No**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

	ü		
Large accelerated	**Accelerated filer**	**Non-accelerated filer**	**Smaller reporting**

filer **company**

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

	ü
Yes	**No**

The number of shares of the Registrant's common stock outstanding as of April 30, 2010, was 13,349,454.

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Part I. Financial Information

Item 1: Condensed Consolidated Financial Statements

Applied Signal Technology, Inc.
Statements of Operations (unaudited)
(in thousands, except per-share data)

	Three Months Ended		Six Months Ended	
	April 30, 2010	**May 1, 2009**	**April 30, 2010**	**May 1, 2009**
Revenues from contracts	$56,219	$51,618	$102,832	$95,305
Revenues from royalty agreements	1,944	1,882	3,411	3,579
Total revenues	58,163	53,500	106,243	98,884
Operating expenses:				
Contract costs	40,850	37,489	74,850	69,020
Research and development	4,046	3,797	7,093	6,872
General and administrative	7,809	5,759	13,648	10,889
Total operating expenses	52,705	47,045	95,591	86,781
Operating income	5,458	6,455	10,652	12,103
Interest income, net	(34)	69	(37)	181
Income before provision for income taxes	5,424	6,524	10,615	12,284
Provision for income taxes	2,128	2,450	4,180	4,695
Net income	$3,296	$4,074	$6,435	$7,589
Net income per common share:				
Basic	$0.25	$0.31	$0.48	$0.58
Diluted	$0.24	$0.31	$0.48	$0.58
Number of shares used in calculating net				

income per common share:				
Basic	13,091	12,852	13,079	12,803
Diluted	13,230	13,033	13,222	12,978

See accompanying notes

Applied Signal Technology, Inc.
Balance Sheets
(in thousands, except share data)

Assets	April 30, 2010 (unaudited)	October 31, 2009†
Current assets:		
Cash and cash equivalents	$9,738	$4,102
Short-term investments	10,010	43,454
Total cash, cash equivalents, and short-term investments	19,748	47,556
Accounts receivable:		
Billed	32,575	26,630
Unbilled	17,164	20,433
Total accounts receivable	49,739	47,063
Inventory	11,698	8,378
Prepaid and other current assets	11,218	10,517
Total current assets	92,403	113,514
Property and equipment, at cost:		
Machinery and equipment	47,284	46,517
Furniture and fixtures	4,813	4,756
Leasehold improvements	20,048	18,480
Construction in process	763	647
	72,908	70,400
Accumulated depreciation and amortization	(57,738)	(55,405)

Property and equipment, net	15,170	14,995
Long-term investments	1,062	2,129
Goodwill	54,682	33,158
Intangible assets, net of accumulated amortization	5,349	1,904
Long-term deferred tax asset	4,308	4,196
Other assets	1,593	1,104
Total assets	$174,567	$171,000

Applied Signal Technology, Inc.
Balance Sheets (continued)
(in thousands, except share data)

Liabilities and Shareholders' Equity	April 30, 2010 (unaudited)	October 31, 2009†
Current liabilities:		
Accounts payable	$4,598	$6,807
Accrued payroll and related benefits	13,369	15,351
Note payable	1,429	1,429
Income taxes payable	2,135	444
Other accrued liabilities	4,343	2,298
Total current liabilities	25,874	26,329
Long-term note payable	1,786	2,500
Accrued rent	2,036	2,103
Other long-term liabilities	1,042	1,043
Shareholders' equity:		
Common stock and additional paid-in capital, no par value: 35,000,000 shares authorized; issued and outstanding shares: 13,349,454 at April 30, 2010, and 13,211,462 at October 31, 2009	78,205	76,492
Retained earnings	65,703	62,600

Accumulated other comprehensive income	(79)	(67)
Total shareholders' equity	143,829	139,025
Total liabilities and shareholders' equity	$174,567	$171,000

†The balance sheet at October 31, 2009, has been derived from the audited financial statements at that date but does not include all of the information required by accounting principles generally accepted in the United States for complete financial statements.

See accompanying notes

Applied Signal Technology, Inc.
Statements of Cash Flows (unaudited)
(in thousands)

	Six Months Ended	
	April 30, 2010	**May 1, 2009**
Operating Activities		
Net income	$6,435	$7,589
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	3,541	3,056
Stock-based compensation	1,049	1,068
Excess tax benefits from stock-based payment arrangements	(74)	(251)
Changes in:		
Accounts receivable	735	(4,486)
Inventory, prepaid expenses, and other assets	(5,517)	(2,281)
Accounts payable, taxes payable, and accrued liabilities	(3,450)	(2,413)
Net cash provided by operating activities	2,719	2,282
Investing Activities		
Cash paid for business acquired, net	(24,327)	—
Cash from Pyxis escrow account, net	673	—

Purchases of available-for-sale securities	(39,134)	(28,801)
Maturities and sales of available-for-sale securities	73,108	31,285
Additions to property and equipment	(2,812)	(2,684)
Net cash provided by (used in) investing activities	7,508	(200)
Financing Activities		
Issuances of common stock	772	2,331
Shares repurchased for tax withholding of vested restricted stock awards	(168)	(127)
Excess tax benefits from stock-based payment arrangements	74	251
Term loans	(1,954)	(834)
Dividends paid	(3,315)	(3,227)
Net cash used in financing activities	(4,591)	(1,606)
Net increase in cash and cash equivalents	5,636	476
Cash and cash equivalents at beginning of period	4,102	4,668
Cash and cash equivalents at end of period	$9,738	$5,144
Supplemental disclosures of cash flow information:		
Interest paid	$108	$149
Income taxes paid	$2,265	$4,733

See accompanying notes

Applied Signal Technology, Inc.
Notes to Condensed Consolidated Financial Statements (unaudited)
April 30, 2010

Note 1: Summary of Significant Accounting Policies

Description of Business and Basis of Presentation

Applied Signal Technology, Inc. (AST) provides advanced intelligence, surveillance, and reconnaissance (ISR) solutions to enhance global security. We provide systems, products, and services in the areas of communications, signals intelligence (SIGINT), cyber intelligence, and sensor signature processing. Our communication capabilities include the development and production of communication support products, bandwidth compression software, and network management software. Our SIGINT competencies include communications intelligence (COMINT) and electronic intelligence (ELINT). Our cyber intelligence capabilities include high-speed network monitoring, deep

packet inspection, and high-end software engineering services. Our sensor signature expertise includes processing information from electro-optic, sonar, radar, magnetic, and chemical sensors to detect changes in the environment. We develop and manufacture sophisticated sensors and digital signal processing equipment that use advanced software.

Substantially all of our revenues were from contracts with the United States Government or prime contractors for the United States Government.

The accompanying unaudited, condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements, and should be read in conjunction with the financial statements and footnotes thereto included in our Annual Report on Form 10-K for the year ended October 31, 2009. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three-month and six-month periods ended April 30, 2010, are not necessarily indicative of the results that may be expected for the year ending October 31, 2010. The balance sheet at October 31, 2009, has been derived from the audited financial statements at that date but does not include all of the information required by accounting principles generally accepted in the United States for complete financial statements.

Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ significantly from those estimates.

Principles of Consolidation

The financial statements include the accounts of AST and its wholly owned subsidiaries, Dynamics Technology, Inc. (DTI), Pyxis Engineering, LLC (Pyxis) (from the acquisition date on September 1, 2009), and Seismic, LLC (from the acquisition date on April 28, 2010). All significant intercompany transactions have been eliminated.

Revenues and Contract Accounting

Revenues and cost recognition. Our contracts are executed through 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. The majority of our contracts are accounted for following the authoritative guidance for construction-type and production-type contracts. We recognize revenue on a limited number of standalone software contracts following the guidance for software revenue. For these software contracts, we defer revenue that is related to billings and customer payments in advance of the completion of the performance requirements set forth in the contracts.

As a supplier to the United States Government, we are required to 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. Among the causes for suspension are violations of various statutes, including those related to procurement integrity, export control, United States Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corrupt practices. The Government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting. The Government audits and investigations can take several years to complete. Depending on the results of these audits and investigations, the Government may make claims against us or take exception to certain costs we determined to be recoverable. In the period management determines recoverability

is not likely, reserves are established for the estimated loss by a charge to operating income.

We account for cost-reimbursement contracts by charging actual labor, materials, and other direct costs, plus estimated indirect costs of operations as incurred, including overhead, research and development (R&D), and general and administrative expenses (incurred costs). Stock compensation expense is not reimbursable under these contracts. Beginning in the first quarter of fiscal year 2009, we apply indirect costs to all subcontract costs.

We recognize contract revenues and profits on cost-reimbursement contracts by applying an estimated fee rate to all incurred costs on an individual contract basis. Fee calculations are based on either negotiated fee amounts or management's assessment of the fee amounts that are likely to be earned. On cost-reimbursement contracts, we may bear unexpected cost increases for purposes of maintaining customer relationships. Historically, the effect on operating results and financial condition from cost-reimbursement losses has been minimal.

Our policy for recognizing interim award fees 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 thereof will be earned, on a contract-by-contract basis. Management bases its assessments 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 in whole or in part until management determines that it is probable that the award fee or portion thereof will be earned. Historically, management's estimates have generally been consistent with the actual fees awarded. However, changes in facts and circumstances could arise within an award fee period, causing management to either lower or raise the award fee estimate in the period in which the changes occur.

Our time-and-materials contracts are performed on a level-of-effort basis. We recognize revenue for these contracts by applying a negotiated billing rate to the level of effort.

We account for fixed-price contracts by using the percentage-of-completion method. Under this method, we charge labor, materials, and other direct costs, plus estimated indirect costs of operations, as they are incurred. Each period, we recognize as revenue 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 costs incurred and the estimated costs to complete. On fixed-price contracts, we bear the risk of any 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, and these costs could have a materially adverse effect on our results of operations.

We have one licensing agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Royalties contributed approximately $1,944,000 and $3,411,000 to revenues and operating income for the three-month and six-month periods ended April 30, 2010, respectively, and $1,882,000 and $3,579,000 for the three-month and six-month periods ended May 1, 2009, respectively.

The following table represents our revenue concentration during the respective periods by contract type.

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Cost-reimbursement contracts	78%	61%	76%	61%
Time-and-materials contracts	10%	21%	11%	20%
Fixed-price contracts	9%	15%	10%	15%

Royalty contracts	3%	3%	3%	4%
	100%	100%	100%	100%

The following table represents the revenue concentration from significant contracts during the respective periods. Due to security requirements of the United States Government, we are unable to disclose the actual contract names. Therefore, for the ease of the reader, we have renamed these contracts for reporting purposes in the table below.

	Three Months Ended		Six Months Ended	
	April 30, 2010	**May 1, 2009**	**April 30, 2010**	**May 1, 2009**
Next Generation ASA	20%	—	20%	—
Thunderdome	11%	—	12%	—
Tiffany	11%	19%	11%	19%
ASA	—	17%	—	17%
High Beam	—	9%	—	11%
Stone Face II	—	5%	5%	6%
Specter	—	5%	—	—
Raider	—	—	—	5%
	42%	55%	48%	58%

a dash (—) designates less than 5% revenue concentration

The following contracts were indefinite-delivery-indefinite-quantity (IDIQ) contracts: Next Generation ASA, Tiffany, ASA, and Stone Face II. Under the terms of this type of contract, the Government may issue individual delivery orders (DOs) for goods or services that they require. Each DO is treated as a separate contract, which may be awarded on a cost-reimbursable, fixed-price, or time-and-materials basis. We typically aggregate the DOs under each IDIQ contract for purposes of distinguishing significant revenue concentrations. However, Thunderdome is a significant, individual DO within an IDIQ contract.

ASA is a time-and-materials contracts and Raider is a fixed-price contract. All of the other contracts referenced are cost-reimbursement contracts.

For those contracts in which all of the terms have not yet been finalized, revenue does not include an estimated fee rate on cost.

Project management reviews contract performance, costs incurred, and estimated completion costs regularly. We adjust revenues and profits on all contracts in the period in which changes, including anticipated losses, become estimable or determinable.

Precontract costs represent costs incurred in anticipation of specific expected future contract awards and costs incurred in connection with ongoing contracts for which contract modifications have not been defined or completed at the end of the reporting period. These costs are included in other current assets on the balance sheet. Precontract costs incurred at April 30, 2010, and October 31, 2009, were approximately $1,964,000 and $1,139,000, respectively. Approximately $1,106,000 of the October 31, 2009, balance was recognized as revenue during the six months ended April 30, 2010.

Indirect rate variance adjustments to operations. We record contract revenues and costs of operations for interim reporting purposes based on annual targeted indirect rates. During our interim reporting periods, variances may accumulate between the actual indirect rates and the annual targeted rates. Timing-related indirect spending variances are removed from contract costs, research and development, and general and administrative expenses, and are included in inventory as part of work in process during these interim reporting periods. These rates are reviewed regularly, and we record adjustments for any material, permanent variances in the period they become estimable. At the beginning of fiscal year 2009, we implemented a new rate structure, which changed the application of certain general and administrative expenses to contracts that created a one-time increase to operating income of approximately $450,000 from fixed-price contracts.

Our accounting policy for recording indirect rate variances is based on management's belief that variances accumulated during interim reporting periods will be absorbed by expected contract activities during the remainder of the year. We consider the rate variance to be unfavorable when our actual indirect rates are greater than our annual targeted rates. In contrast, a favorable rate variance occurs when our actual indirect rates are lower than our annual targeted rates. During interim reporting periods, we record unfavorable rate variances as reductions to operating expenses and increases to work in process inventory. Favorable rate variances are recorded as increases to operating expenses and decreases to work in process inventory.

If we anticipate that actual contract activities will be different than planned levels, there are alternatives we can utilize to absorb the variance: we can adjust our planned indirect spending during the year, we can modify our billing rates to our customers through the Defense Contract Audit Agency in accordance with Federal Acquisition Regulations, or we can record adjustments to expense based on estimates of future contract activities for the remainder of the fiscal year.

If our rate variance is unfavorable, the modification of our billing rates will likely increase revenue and operating expenses, and decrease the unfavorable indirect rate variance accumulated in inventory. Fee percentages on fixed-price and time-and-materials contracts will generally decline as a result of any increase to indirect costs. Fee percentages on active cost-reimbursable contracts will generally be unaffected as a result of any increase to indirect costs. Fee percentages on completed cost-reimbursable contracts will generally be reduced. If our rate variance is favorable, in general, the modification of our billing rates will generally decrease revenue and operating expenses, and decrease the favorable indirect rate variance accumulated in inventory. In this event, fee percentages on fixed-price and time-and-materials contracts will generally increase. Fee percentages on cost-reimbursable contracts will generally be unaffected as a result of any reduction to indirect costs, due to the fact that programs will typically expend all of the funds available. Any impact on operating income, however, will depend on a number of other factors, including mix of contract types, contract terms, anticipated performance on specific contracts, and anticipated changes in inventory.

At April 30, 2010, the unfavorable rate variance was approximately $98,000, and at May 1, 2009, the unfavorable rate variance was approximately $115,000.

Accounts receivable and allowance for bad debt. Accounts receivable are segregated between billed and unbilled accounts. For cost-reimbursement contracts, we bill incurred costs and a portion of our fees on a regular basis. Under fixed-price contracts, we bill contract costs on a milestone or unit-of-delivery basis. Unbilled amounts result from our recognition of contract revenue in advance of contractual billing terms.

When evaluating our need for a bad debt allowance, we consider our customer base and their payment history. The majority of our revenues are generated from the United States Government, and therefore, credit risk is minimal. We record allowances for bad debt as a reduction to accounts receivable and an increase to bad debt expense. These allowances are recorded in the period a specific collection problem is identified. Once the receivable is deemed uncollectible, the allowance is reversed and the receivable is written off to bad debt expense. Charges to bad debt expense were not significant during the first six months of fiscal years 2010 and 2009.

Inventory valuation and disposal. Typical life cycles of our products are eight to ten years or more. In addition, we maintain spare parts in order to repair the equipment. We evaluate our inventory quarterly at interim reporting periods, and assess our ability to sell our products, which include raw materials. Historically, we have sold our inventory at or above cost, so there was typically no decrement in valuation. When we determine a product has reached the end of its life cycle or there is no longer a need for a certain product, typically, we will dispose of any remaining inventory and record the associated reduction to inventory. Historically, any disposals of raw materials represent a minor amount. These disposals are included in general and administrative expenses on the statement of operations because we use raw materials in a variety of situations other than contract costs, including R&D. Disposals of other obsolete inventory and raw materials were not significant during the first six months of fiscal years 2010 and 2009.

If we determine that the estimated market value of certain inventory is below cost, we will write down the inventory to the estimated market value. We did not write down any inventory during the first six months of fiscal year 2010. During the three-month and six-month period ended May 1, 2009, we recorded an inventory write-down of approximately $422,000 to reflect the estimated market value of one inventoried product. Subsequent sale of inventory that has been subject to a write-down has not been significant to date.

Income Taxes

We estimate our income taxes in each of the taxing jurisdictions in which we operate. Our effective tax rate can differ from the statutory rate primarily due to research and development credits and tax exempt interest, offset by the non-tax-deductible nature of meals and entertainment expense and certain types of stock-based compensation expense. In addition, our process involves estimating our current tax expense together with assessing any temporary differences resulting from the different treatment of certain items, such as the timing for recognizing certain expenses, for tax and accounting purposes. These differences may result in deferred tax assets and liabilities, which are included in our consolidated balance sheet. We are required to assess the likelihood that our deferred tax assets, which included our net operating loss carryforwards and temporary differences that are expected to be deductible in future years, will be recoverable from future taxable income or other tax planning strategies. If recovery is not likely, we have to provide a valuation allowance based on our estimates of future taxable income in the various taxing jurisdictions, and the amount of deferred taxes that are ultimately realizable. The provision for current and deferred taxes involves evaluations and judgments of uncertainties in the interpretation of complex tax regulations by various taxing authorities. Actual results could differ from our estimates.

We also recognize the impact of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than 50% likelihood of being sustained.

We record interest or penalties related to income taxes as a component of income tax expense in our financial statements.

Please refer to “Notes to Consolidated Financial Statements, Note 8: Provision for Income Taxes” for further information.

Price Redetermination

As a Government contractor, we are subject to price redetermination on certain fixed-price contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal Acquisition Regulations. We did not incur any price redeterminations on any of our contracts during the first six months of fiscal years 2010 and 2009.

Cash, Cash Equivalents, and Investments

Cash and cash equivalents balances include cash held in banks to support daily cash needs and were approximately $9,738,000 on April 30, 2010, and approximately $4,102,000 on October 31, 2009. We consider all highly liquid debt instruments purchased with an original maturity date of three months or less to be cash equivalents. Cash equivalents include money market funds and municipal securities.

Our remaining securities are classified as available for sale and are carried at fair value in short-term and long-term investments. At April 30, 2010, all of our short-term and long-term investments consist of municipal securities. At the time of purchase, management determines the appropriate classification of these securities and re-evaluates such designation as of each balance sheet date. Unrealized gains and losses, net of tax, are reported in shareholders' equity as part of comprehensive income. The cost of securities sold is based on the specific identification method. Proceeds from the sale of available-for-sale securities were approximately $6,577,000 for the first six months of fiscal years 2010. We did not have any sales of available-for-sale securities during the first six months of fiscal year 2009. Realized gains and losses on sales of available-for-sale securities were not material for the first six months of fiscal years 2010 and 2009.

The following tables summarize our cash equivalents, short-term securities, and long-term securities (in thousands).

	April 30, 2010			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	$1,803	—	—	$1,803
Available-for-sale securities:				
Short-term municipal	10,008	3	(1)	10,010
Long-term municipal	1,061	1	—	1,062
	$12,872	$4	$(1)	$12,875

	October 31, 2009			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	2,028	—	—	2,028

Available-for-sale securities:				
Short-term municipal	43,403	51	—	43,454
Long-term municipal	2,131	—	(2)	2,129
	$47,562	$51	$(2)	$47,611

The following table summarizes the effective maturities of our available-for-sale investments (in thousands).

	April 30, 2010	October 31, 2009
Due in one year or less	$10,010	$43,454
Due in one to two years	1,062	2,129
	$11,072	$45,583

The decline in the balance of our investment portfolio is primarily due to the acquisition of Seismic at the end of the second quarter of fiscal year 2010 and what we believe to be short-term delays in the government payment process for our billed accounts receivable.

Fair Value

The fair value accounting standard defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. It also establishes a framework for measuring fair value. We adopted the requirements of the fair value standard as they relate to certain non-financial assets and liabilities on November 1, 2009. This adoption did not have a material impact on our results of operations, financial position, or cash flows. The standard on fair value measurement establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

- ***Level 1***. Quoted (unadjusted) prices in active markets for identical assets or liabilities
- ***Level 2***. Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data
- ***Level 3***. Unobservable inputs that are supported by little or no market activity and are significant to the measurement of the fair value of the assets or liabilities

The following table presents information about the Company’s financial assets and liabilities measured at fair value on a recurring basis (in thousands).

	April 30, 2010			
	Quoted Prices in Active Markets for Identical Instruments (Level	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs	Total Fair Value

	1)		(Level 3)	
Assets				
Cash equivalents				
Money market funds	$1,803	$—	$—	$1,803
Available-for-sale securities:				
Short-term municipal	—	10,010	—	10,010
Long-term municipal	—	1,062	—	1,062
Total assets	$1,803	$11,072	$—	$12,875
Liabilities				
Contingent consideration	—	—	$2,047	$2,047
Interest rate swap	—	82	—	82
Total liabilities	$—	$82	$2,047	$2,129

	October 31, 2009		
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	**Significant Other Observable Inputs (Level 2)**	**Total Fair Value**
Assets			
Cash equivalents			
Money market funds	$2,028	$—	$2,028
Available-for-sale securities:			
Short-term municipal	—	43,454	43,454
Long-term municipal	—	2,129	2,129
Total assets	$2,028	$45,583	$47,611

Liabilities			
Interest rate swap	$—	$116	$116
Total liabilities	$—	$116	$116

As of April 30, 2010, our investment portfolio did not include investments in assets valued using Level 3 inputs.

Our money market funds are priced by using unadjusted prices in active markets for identical assets.

We determine the fair values of our municipal securities by using pricing models with inputs that are observable in the market or can be derived principally from or corroborated by observable market data, such as municipal yield curves and credit ratings.

We have a contingent consideration liability that is payable to the former members of Seismic. We recorded $2.0 million in other accrued liabilities in our consolidated balance sheet based on future revenues projected over a one-year period from the date of acquisition of April 28, 2010. We estimated the fair value of this liability by using the expected cash flow approach with revenue inputs being probability-weighted. Please refer to “Notes to Consolidated Financial Statements, Note 3: Business Combinations” for further information on the terms of the agreement as it pertains to the contingent consideration.

The inputs used to value the interest rate swap liability are based on observable market data such as the London Inter-Bank Offered Rate (LIBOR) swap rate (floating interest rate), a fixed rate (term loan interest rate), a discount factor, and a calculation of a present value of the interest paid/received based on the expected loan principal. Please refer to “ Notes to Consolidated Financial Statements, Note 5: Borrowing Arrangements” for further information.

The following table presents the changes in our liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) at April 30, 2010 (in thousands).

	Significant Unobservable Inputs (Level 3)
Balance at October 31, 2009	$—
Contingent consideration	2,047
Balance at April 30, 2010	$2,047

Restricted Cash

We had restricted cash balances of approximately $679,000 and $663,000 at April 30, 2010, and at October 31, 2009, respectively. These balances primarily include contributions made by our employees residing in California for disability funds. These contributions were paid in lieu of participating in the state-sponsored disability program.

Approximately $152,000 was included in prepaids and other current assets at both April 30, 2010, and October 31, 2009. Approximately $527,000 and $511,000 was included in other assets at April 30, 2010, and at October 31, 2009,

respectively.

Property and Equipment

Machinery and equipment, as well as furniture and fixtures, are depreciated by using the straight-line method over the estimated useful lives of the assets, ranging up to five years. Leasehold improvements are amortized by using the straight-line method over the lesser of the useful life of the assets or the remaining lease term. Construction in process includes costs incurred to build leasehold improvements and test equipment that have not yet been placed into service.

Business Combinations, Goodwill, and Long-Lived Asset Valuation

Effective at the beginning of our fiscal year on November 1, 2009, we adopted the revised accounting standard, *Business Combinations* (ASC Topic 805). The revised standard retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It requires that contingent consideration be recognized at fair value at the date of the acquisition, and requires the capitalization of in-process research and development at fair value, and the expensing of acquisition-related transaction costs as incurred.

We allocated the purchase prices of Pyxis and Seismic to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. We engaged a third-party appraisal firm to assist management in determining the fair values of certain assets acquired and liabilities assumed, and the fair value of the contingent consideration payable to the former shareholders of Seismic (the Seismic Earn-Out). The valuations required management to make significant estimates and assumptions, especially with respect to intangible assets and the Seismic Earn-Out.

Management made estimates of fair value based upon assumptions believed to be reasonable. These estimates were based on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets included, but were not limited to, future expected cash flows from funded backlog, unfunded backlog, future contracts, and non-compete agreements.

Critical estimates in valuing the contingent consideration for Seismic included the probability of achieving target levels of revenues for the acquired business. In accordance with the revised standard for business combinations, the fair value of the Seismic Earn-Out was included as part of the initial purchase price, and will be remeasured at each subsequent balance sheet date. The subsequent adjustments to fair value will be recorded to operating expense.

Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates, or actual results. Please refer to “Notes to Consolidated Financial Statements, Note 3: Business Combination” for further information.

Goodwill valuation. We test goodwill for possible impairment on an annual basis, as of the first day of the fourth quarter, and at any other time if events occur or circumstances indicate that the current carrying amount of goodwill may not be recoverable. Circumstances that could trigger an impairment test include, but are not limited to, a significant adverse change in the business climate or legal factors, an adverse action or assessment by a regulator, unanticipated competition, and loss of key personnel.

To perform the goodwill impairment test, we determine the fair value of the reporting unit and compare the fair value to the reporting unit’s carrying value. We believe AST is one reporting unit, and therefore, we compare the fair value of AST to the total net asset value on our balance sheet. If our total net asset value were to exceed our fair value, we would perform the second step of the impairment test. In the second step, we would compare the implied fair value of our goodwill to our carrying amount, taking a write-down to the extent the carrying amount exceeds the implied fair value. If the fair value of AST exceeds the carrying value of our net assets under step one, then no impairment is

indicated and the test is complete.

There were no indicators of impairment as of April 30, 2010.

Long-lived asset valuation (property, plant and equipment, and intangible assets). We test long-lived assets or asset groups for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances that could trigger a review include, but are not limited to, significant decreases in the market price of the asset, significant adverse changes in the business climate or legal factors, accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset, current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset, and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.

We assess recoverability based on the carrying amount of the asset and its fair value, which is generally determined based on the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. We recognize an impairment loss when the carrying amount is not recoverable and exceeds fair value.

There were no indicators of impairment as of April 30, 2010.

Net Income Per-Share Data

In the first quarter of fiscal year 2010, we adopted new guidance issued by the staff of the Financial Accounting Standards Board (included in ASC Topic 260-10-45) on determining whether instruments granted in share-based payment transactions are participating securities. This guidance requires us to include our unvested restricted stock awards, which have rights to receive dividends, as participating securities in the calculation of net income per share using the two-class method. We are required to apply this method retrospectively, and we have adjusted prior period calculations. For the three months and six months ended May 1, 2009, the adoption of this guidance decreased our previously reported basic net income per share by $0.01 and $0.01, respectively, and had no impact on the diluted net income per share.

Under the two-class method, we allocate a portion of net income to the participating securities and exclude that income from the net income allocated to common stock. Basic net income per share is determined by dividing the net income allocated to common stock by the weighted average number of common shares outstanding during the period. Diluted net income per share is determined by dividing the net income allocated to common stock by the weighted average number of common shares used in the basic calculation plus the number of common shares issuable for dilutive stock options under the treasury stock method. The result of this method is more dilutive than if we had used the treasury stock method to calculate the dilutive impact of the restricted stock.

The per-share data is as follows (in thousands, except per-share amounts).

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Numerator:				
Net income	$3,296	$4,074	$6,435	$7,589
Less income allocated to participating securities (restricted stock awards)	(59)	(56)	(107)	(105)

Net income allocated to common stock	$3,237	$4,018	$6,328	$7,484
Denominator:				
Shares used to compute net income per common share – basic	13,091	12,852	13,079	12,803
Effect of dilutive stock options	139	181	143	175
Shares used to compute net income per common share – diluted	13,230	13,033	13,222	12,978
Net income per common share – basic	$0.25	$0.31	$0.48	$0.58
Net income per common share – diluted	$0.24	$0.31	$0.48	$0.58

We excluded approximately 461,000 and 464,000 potential common shares for the three-month and six-month periods ended April 30, 2010, respectively, from the diluted net income per common share computation, as their effect would be anti-dilutive. For the same periods in fiscal year 2009, we excluded 468,000 and 735,000 potential common shares, respectively, from the diluted net income per common share computation for the same reason.

Comprehensive Income

The components of comprehensive income, net of tax, are as follows (in thousands).

	Three Months Ended		Six Months Ended	
	April 30, 2010	**May 1, 2009**	**April 30, 2010**	**May 1, 2009**
Net income	$3,296	$4,074	$6,435	$7,589
Unrealized gain (loss) on securities	(22)	(45)	(46)	74
Derivative gain (loss)	17	3	34	(69)
Comprehensive income	$3,291	$4,032	$6,423	$7,594

The balance of accumulated comprehensive income on securities as of April 30, 2010, and October 31, 2009, was approximately $3,000 and $49,000, respectively. The derivative-related accumulated comprehensive loss balance was approximately $82,000 and $116,000 as of April 30, 2010, and October 31, 2009, respectively.

Dividends

We have paid dividends at the rate of $0.50 per share per annum, payable quarterly. Continued payment of the dividend is subject to approval by the Board of Directors and is reviewed quarterly. We paid dividends on November 13, 2009, February 12, 2010, and May 14, 2010, to shareholders of record at October 31, 2009, January 29, 2010, and April 30, 2010, respectively.

We paid dividends of approximately $3,315,000 during the first six months of fiscal year 2010 and approximately $3,227,000 during the first six months of fiscal year 2009.

At April 30, 2010, and October 31, 2009, accrued dividends of approximately $1,669,000 and $1,651,000, respectively, were included in other accrued liabilities on the accompanying balance sheet.

Stock-Based Compensation

We have stock-based compensation programs that enable our Board of Directors to award employee equity incentives. These programs include restricted stock awards and incentive and non-statutory stock options granted under various plans. Restrictions on our restricted stock awards typically lapse in four equal annual installments, on each anniversary of the grant date, conditioned on continued employment. The restrictions on restricted stock granted to our non-employee directors typically lapse in three equal annual installments. Stock options granted in 2006 and prior years are generally time-based, typically vesting 20% on each anniversary of the grant date over five years, and expiring eight or ten years from the grant date, conditioned on continued employment.

Additionally, we have an Employee Stock Purchase Plan (ESPP). For offering periods beginning prior to December 1, 2008, the ESPP allowed employees to purchase shares of common stock at 85% of the closing stock price at the lower of either the date of enrollment or the date of purchase. For offering periods subsequent to December 1, 2008, the purchase price is 95% of the closing stock price on the date of purchase, and therefore, is non-compensatory under the authoritative guidance for stock-based compensation. The remaining expense related to the final compensatory award under the ESPP was recognized in the first quarter of fiscal year 2009.

As of April 30, 2010, 522,483 shares were reserved for future issuance under the equity incentive plans and 698,979 shares were reserved for future issuance under the ESPP plan.

We recognize stock compensation expense on a straight-line basis over the requisite service period of the award, which generally equals the vesting period of each grant.

The following table sets forth the total stock-based compensation expense resulting from the grant of stock options, restricted stock awards, and purchases under the ESPP included in our condensed consolidated statements of operations (in thousands, except share data).

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Contract costs	$298	$260	$616	$663
Research and development	12	15	24	36
General and administrative	192	176	409	369
Stock-based compensation expense before income taxes	$502	$451	$1,049	$1,068
Income taxes				

	(185)	(149)	(377)	(328)
Stock-based compensation expense after income taxes	$317	$302	$672	$740

Stock-based compensation expense recognized in the consolidated statement of operations reflects estimated forfeitures that are based on historical option forfeitures.

The net cash proceeds associated with our ESPP were $635,000 for the six-month period ended April 30, 2010, and $1,473,000 for the six-month period ended May 1, 2009.

Stock option activity for the six months ended April 30, 2010, is as follows.

	Shares	Weighted Average Exercise Price
Outstanding at October 31, 2009	947,147	$19.57
Grants	—	—
Exercised	(15,550)	$8.87
Forfeitures or expirations	(29,929)	$19.37
Outstanding at April 30, 2010	901,668	$19.77
Exercisable at April 30, 2010	812,188	$19.94

Net cash proceeds from the exercise of stock options were approximately $138,000 and $858,000 for the six-month periods ended April 30, 2010, and May 1, 2009, respectively. Unrecognized compensation cost associated with unvested stock options as of April 30, 2010, is approximately $280,000, and is expected to be recognized over a weighted average period of approximately 0.75 years.

The following table summarizes our restricted stock grant activity for the six months ended April 30, 2010.

Nonvested Shares	Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested at October 31, 2009	181,733	$17.69
Grants	108,500	$19.31
Vested	(36,745)	$16.06
Forfeitures	(9,521)	$17.09
Nonvested at April 30, 2010	243,967	$18.73

The fair value of our restricted stock is based on our closing stock price on the date of grant. Our unrecognized compensation cost related to nonvested (restricted) stock is $3,574,000, and is expected to be recognized over a weighted average period of 2.82 years.

We realized a net income tax benefit of approximately $61,000 from stock options exercised or forfeited and restricted stock vested during the first six months of fiscal year 2010. For the same period of fiscal year 2009, we experienced a net income tax benefit of $241,000. As required, we present excess tax benefits from the exercise of stock options and the vesting of restricted stock, if any, as financing cash flows rather than operating cash flows.

Recent Accounting Pronouncements

In October 2009, the FASB issued ASC Update No. 2009-13, updating ASC Topic 605, *Revenue Recognition*. This update provides new standards for revenue recognition for arrangements with multiple deliverables. These new standards affect the determination of when the individual deliverables may be treated as separate units of accounting. Additionally, these new standards modify the method of allocating consideration to the deliverables. The relative fair value method based on selling prices will be required and the residual method of allocating arrangement consideration will no longer be permitted. This new standard is effective for our fiscal year beginning November 1, 2010. Although the majority of our contracts are accounted for under the guidance for construction-type and production-type contracts, we are currently evaluating the potential impact, if any, on our financial position, results of operations, or cash flows as a result of adopting this new standard.

In October 2009, the FASB issued ASC Update No. 2009-14, updating ASC Topic 985, *Software*. This update provides new standards that amend the scope of previous software revenue guidance by excluding non-software components of tangible products and certain software components of tangible products. This new standard is effective for our fiscal year beginning November 1, 2010. Although the majority of our contracts are accounted for under the guidance for construction-type and production-type contracts, we are currently evaluating the potential impact, if any, on our financial position, results of operations, or cash flows as a result of adopting this new standard.

In January 2010, the FASB issued ASU No. 2010-06, *Improving Disclosures about Fair Value Measurements* (ASU 2010-06). ASU 2010-06 requires new disclosures for (i) transfers of assets and liabilities in and out of Levels 1 and 2 fair value measurements, including a description of the reasons for such transfers and (ii) additional information in the reconciliation for fair value measurements using significant unobservable inputs (Level 3). This guidance also clarifies existing disclosure requirements including (i) the level of disaggregation used when providing fair value measurement disclosures for each class of assets and liabilities and (ii) the requirement to provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements for Level 2 and 3 assets and liabilities. ASU 2010-06 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the disclosures about activity in the roll forward for Level 3 fair value measurements, which is effective for fiscal years beginning after December 15, 2010. The adoption of this guidance has not had a material impact on our financial position and results of operations.

Note 2: Inventory

Inventories are stated at the lower of average cost or market and consisted of the following (in thousands):

	April 30, 2010	October 31, 2009
Raw materials	$747	$767
Work in process	9,621	7,070
Finished goods	1,330	541
	$11,698	$8,378

At April 30, 2010, the unfavorable indirect rate variance included in work in process was approximately $98,000.

We did not write-down any inventory during the first six months of fiscal year 2010. During the three-month and six-month periods ended May 1, 2009, we recorded an inventory write-down of approximately $422,000 to reflect the estimated market value of one inventoried product.

Note 3: Business Combinations

On April 28, 2010, we acquired all of the outstanding membership interests in Seismic, LLC, and accounted for this purchase in accordance with the revised accounting standard for business combinations. Seismic has been engaged in cyber security solutions, software engineering, data management, and systems engineering and integration services for the Department of Defense and Intelligence Community. In September of our fiscal year 2009, we acquired all of the outstanding membership interests in Pyxis Engineering, LLC, and this purchase was accounted for under the prior accounting standard. Both companies were Maryland limited liability companies. We believe these acquisitions complement our existing software and network services business in the defense and intelligence communities. These acquisitions allow us the opportunity to expand our software and network services business into the emerging cyber security market.

We funded both acquisitions from our available cash and current investments. The fair values assigned to the intangible assets acquired were based on estimates, assumptions, and other information compiled by management, including independent valuations that utilize established valuation techniques. Intangible assets related to the acquisitions, excluding goodwill, are amortized to expense on a straight-line basis over their estimated useful lives, ranging from one to eight years. The results of operations for each acquisition are included in the accompanying statement of operations since the respective acquisition dates.

Acquisition of Seismic. The amount of goodwill recorded for the Seismic acquisition at April 30, 2010, was approximately $21.5 million and reflected the value of the future engineering services revenue opportunities associated with the cyber security marketplace.

The preliminary purchase price as of April 30, 2010, was approximately $26.7 million, which includes cash consideration of $24.7 million and contingent consideration of approximately $2.0 million. Approximately $4.9 million that would otherwise be distributed to the sellers at the closing was deposited into an escrow account to provide a fund against which we may make claims for damages, if any, based on the breaches of the representations made by Seismic in the purchase agreement. Fifty percent of the escrow account will be released on the one-year anniversary of the closing date and the remainder in 18 months from the closing date, net of any claims made by us against Seismic or the sellers under the terms of the purchase agreement.

The sellers are entitled to additional, contingent consideration (the Seismic Earn-Out) based upon the performance of the business acquired from Seismic during the six-month period ending October 31, 2010 (the Initial Earn-Out Period), and the following six-month period ending April 30, 2011 (the Subsequent Earn-Out Period). The Seismic Earn-Out is based on several key factors, including the revenue recorded during both the Initial and Subsequent Earn-Out Periods, program fees earned during the Initial Earn-Out Period, and the backlog measured on the last day of the Initial Earn-Out Period.

If total revenues that we generate from the acquired Seismic business, as defined in the purchase agreement, are in excess of $23 million during the Earn-Out Period, we will pay the sellers 51.5% of such excess up to a maximum of $2.58 million for revenues of $28 million or more.

If program profits exceed 12% during the Initial Earn-Out Period, there will be no reduction to the payout (based on revenue recorded). If program profits are less than 9% during the Initial Earn-Out Period, no Earn-Out Distribution Amount shall be paid. If Seismic program profits are between 9% and 12%, the payout will be reduced, in accordance

with the terms in the purchase agreement.

If backlog measured on the last day of the Initial Earn-Out Period is greater than $10 million, there will be no reduction to the payout (based on revenue recorded). If backlog measured on the last day of the Initial Earn-Out Period is less than $5 million, no Earn-Out Distribution Amount will be paid. If Seismic backlog is between $5 million and $10 million, the payout will be reduced in accordance with the terms in the purchase agreement.

We recorded a liability of $2.0 million reflecting the fair value of the anticipated Seismic Earn-Out. The fair value was estimated by using the expected cash flow approach with revenue inputs being probability-weighted by using a discount rate of 5.6%. Changes in the fair value of the contingent liability will be recognized in earnings in the period of the change through the settlement of the liability on April 30, 2011.

Certain employees of Seismic are eligible to receive bonus payments up to a maximum total of $2.4 million upon achievement of performance targets. The performance targets include the achievement of the Seismic Earn-Out, as well as individual goals related to employee retention, minimum hiring levels, and new customer relationships. These bonus payments also include a two-year service requirement from the recipients, with fifty percent of the bonus to be paid after one year of service and the remaining portion to be paid at the end of the service period.

In addition, substantially all of the Seismic employees are eligible to receive retention bonus payments if they remain employees of Applied Signal Technology, Inc. through the one-year anniversary of the acquisition. The aggregate amount that could be paid is approximately $1.1 million.

We incurred approximately $901,000 and $911,000 of transaction costs during the second quarter and first six months of fiscal year 2010, respectively. These costs are included in general and administrative expenses within our statement of operations.

Seismic did not make a significant contribution to our revenues or operating income during the three and six-month periods ending on April 30, 2010, due to the fact that the acquisition occurred on April 28, 2010.

We allocated the aggregate preliminary purchase price for the acquisition to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition as follows (in thousands).

Cash and cash equivalents	$363
Accounts receivable and other current assets	3,603
Property and equipment and other assets	100
Accounts payable, accrued payroll and other current liabilities	(1,373)
Notes payable	(1,240)
Seismic Earn-Out	(2,047)
Estimated net tangible assets acquired	(594)
Amortizable intangible assets:	
Future contracts	1,460

Unfunded backlog	1,440
Funded backlog	620
Non-compete agreements	310
Total amortizable intangible assets	3,830
Goodwill	21,454
Total cash consideration	$24,690

The purchase price allocation is subject to agreement on the final closing working capital. The fair value and gross contractual amount of accounts receivable acquired was approximately $3,411,000. As of April 30, 2010, we expect that no amount will be uncollectible.

Pro forma information. The following unaudited pro forma financial information reflects the combined results of AST and Seismic as if the acquisition of Seismic had taken place as of the beginning of the periods presented. The unaudited pro forma financial information is not intended to represent or be indicative of the results of operations or financial condition of AST that would have been reported had the acquisition been completed as of the dates presented, and should not be taken as representative of the future results of operations or financial condition of AST.

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Revenue	$63,086	$56,854	$115,473	$105,140
Net income	$3,182	$3,796	$5,944	$6,687
Basic net income per share	$0.24	$0.29	$0.45	$0.52
Diluted net income per share	$0.24	$0.29	$0.44	$0.51

The unaudited pro forma financial information for the second quarter of both fiscal years 2010 and 2009 includes charges to operating expense for performance bonuses of approximately $322,000, retention bonuses of approximately $270,000, and amortization of intangibles of approximately $252,000. The unaudited pro forma financial information for the first six months of both fiscal years 2010 and 2009 includes charges to operating expense for performance bonuses of approximately $644,000, retention bonuses of approximately $541,000, and amortization of intangibles of approximately $504,000.

Acquisition of Pyxis Engineering. The amount of goodwill recorded for the Pyxis acquisition at October 31, 2009, was approximately $13.2 million and reflected the value of the future engineering services revenue opportunities associated with the cyber security marketplace. During the first six months of fiscal year 2010, we increased the amount of the purchase price allocated to goodwill by $70,000 due to increases in transaction costs. We allocated the

aggregate purchase price for the acquisition to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition as follows (in thousands).

Cash and cash equivalents	$1,382
Accounts receivable and other current assets	4,047
Property and equipment	19
Accrued payroll and other current liabilities	(3,365)
Notes payable	(625)
Net tangible assets acquired	1,458
Amortizable intangible assets:	
Future contracts	880
Unfunded backlog	610
Funded backlog	300
Non-compete agreements	140
Total amortizable intangible assets	1,930
Goodwill	13,264
Total purchase price	$16,652

The sellers are also entitled to additional consideration (the Pyxis Earn-Out) based upon the performance of the business acquired from Pyxis during the 12-month period ending October 31, 2010 (Pyxis Earn-Out Period). If total revenue that we generate from the acquired Pyxis contracts plus new contracts in our cyber intelligence business is in excess of $13.25 million during the Earn-Out Period, we will pay the sellers all of such excess up to a maximum of $3.75 million for revenues of $17 million or more. Any payment of the Pyxis Earn-Out to sellers will result in an increase to goodwill, in the period the contingency is resolved.

In addition, substantially all of the Pyxis employees are eligible to receive retention bonus payments if they remain employees of Applied Signal Technology, Inc. through the end of fiscal year 2010. The aggregate amount that could be paid is approximately $0.6 million.

Note 4: Goodwill and Intangible Assets

The goodwill and identifiable intangible assets are related to our acquisitions of Seismic and Pyxis and the 2005 acquisition of DTI.

Goodwill. Goodwill is not subject to amortization. Rather, we evaluate goodwill for impairment at least annually or more frequently if events and changes in circumstances suggest that the carrying amount may not be recoverable. No impairment was recognized in the first six months of fiscal year 2010.

The activity of our goodwill balance during the first six months of fiscal year 2010 is as follows (in thousands).

Goodwill balance at October 31, 2009	$33,158
Additional transaction costs (Pyxis acquisition)	70
Acquisition of Seismic	21,454
Goodwill balance at April 30, 2010	$54,682

Intangible assets. The tables below present information on our identifiable intangible assets that are subject to amortization (in thousands).

			April 30, 2010	
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Future contracts	7–8 years	$2,340	$(84)	$2,256
Unfunded backlog	3–4 years	2,050	(135)	1,915
Funded backlog	1–2 years	920	(200)	720
Non-compete agreements	2 years	450	(47)	403
Existing technology	5 years	340	(329)	11
Patent	18 years	60	(16)	44
Total		$6,160	$(811)	$5,349

			October 31, 2009	
	Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Future contracts	7 years	$880	$(21)	$859
Unfunded backlog	3 years	610	(34)	576
Funded backlog	1 year	300	(50)	250
Non-compete agreements	2 years	140	(12)	128

Existing technology	5 years	340	(295)	45
Patent	18 years	60	(14)	46
Total		$2,330	$(426)	$1,904

All of our acquired identifiable intangible assets are subject to amortization and have approximate original estimated useful lives as noted in the table above. Amortization expense associated with our intangible assets was approximately $193,000 and $385,000 for the second quarter and first six months of fiscal year 2010, respectively, and $18,000 and $36,000 for the same periods in fiscal year 2009, respectively.

As of April 30, 2010, the estimated future amortization expense for acquired identifiable intangible assets is as follows (in thousands).

Fiscal Years	
Remainder of 2010	$816
2011	1,398
2012	1,073
2013	672
2014	492
Thereafter	898
Total	$5,349

Note 5: Borrowing Arrangements

Revolving line of credit. We entered into a new revolving line of credit (Line of Credit) on February 22, 2010, under which Wells Fargo Bank (Wells Fargo) could advance funds to us, up to a maximum principal amount of $35.0 million. For borrowings under the new Line of Credit we will have the option to bear interest at either Wells Fargo's reference rate or at a fixed rate per annum equal to 2.5% above the London Inter-Bank Offered Rate (LIBOR), and interest on those borrowings is payable monthly. The Line of Credit will expire on February 12, 2012.

As a subfeature under the Line of Credit, Wells Fargo may issue standby letters of credit for us, provided that the aggregate amount of all outstanding letters of credit shall not at any time exceed $3,000,000. At April 30, 2010, we had three standby letters of credit under the Line of Credit, totaling approximately $1,407,000. The first letter of credit, related to our Sunnyvale, California, facilities lease, had a committed balance of approximately $1,221,000 at April 30, 2010. The second letter of credit was a requirement of our workers compensation insurance, and had a committed balance of approximately $150,000 at April 30, 2010. The third letter of credit, a requirement of one of our customers, had a committed balance of $36,000 at April 30, 2010. We do not pay interest on the amounts associated with the standby letters of credit.

As a result of the committed but unused funds associated with the three letters of credit, the total amount under the Line of Credit available for future letters of credit was $1,593,000 and the total amount available for borrowing was approximately $33.6 million at April 30, 2010. No fees or interest were associated with this unused portion.

As security for our indebtedness under the Line of Credit, we have granted to Wells Fargo a security interest in our inventory, equipment, and accounts receivable.

Term loan and interest rate swap. In connection with the 2005 acquisition of DTI, we entered into a term loan with Wells Fargo in the original principal amount of $10 million, plus interest, the proceeds of which were used for acquisition financing (the Term Loan).

The Term Loan bears interest at a fixed rate per annum equal to 1.750% above the LIBOR (0.25% at April 30, 2010). Our Term Loan is for a seven-year term ending on July 1, 2012. The loan terms require us to make monthly payments of principal and interest.

As security for our indebtedness under the Term Loan, we have granted to Wells Fargo a security interest in our accounts receivable, general intangibles, inventory, and equipment.

Under the Line of Credit and the Term Loan, we are required to maintain certain financial covenants setting forth minimum ratios for quick ratio and fixed charge coverage and maximum ratios for total liabilities to tangible net worth. As of April 30, 2010, we were in compliance with these covenants.

We are exposed to market risk from changes in interest rates on the Term Loan, and manage this exposure through the use of an interest rate swap agreement with Wells Fargo. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers the overall borrowing costs should interest rates rise. The interest rate swap is accounted for under the authoritative guidance for derivative instruments, and it is designated as a cash flow hedge. We do not anticipate losses on the agreement due to counterparty credit issues. Under this swap, we pay an interest rate of 4.33%, per annum, over the seven-year term of the loan and receive an average floating rate of LIBOR on the notional amount of the loan. Thus, we exchanged a variable rate obligation for a fixed interest obligation, resulting in an effective interest rate of 6.08%.

The effective portion of the cash flow hedge is reported as other comprehensive income and is reclassified into earnings in the same period during which the hedged transaction affects earnings. At April 30, 2010, the effective portion of the cash flow hedge was a deferred loss of approximately $135,000 on a gross basis. The deferred loss net of taxes was approximately $82,000 and was included in other comprehensive income and long-term liabilities on our balance sheet. During the three months and six months ended April 30, 2010, we recognized losses related to the hedge of approximately $6,000 and $19,000 in other comprehensive income, respectively. During the same periods for fiscal year 2009, we recognized losses related to the hedge of approximately $32,000 and $176,000 in other comprehensive income, respectively. During the three months and six months ended April 30, 2010, we recognized interest expense of approximately $35,000 and $73,000, respectively, reclassified from other comprehensive income. During the same periods for fiscal year 2009, we recognized interest expense of $45,000 and $81,000, respectively, reclassified from other comprehensive income. Over the next twelve months, we expect to reclassify approximately $100,000 of the loss to interest expense as principal on the Term Loan is repaid and the related swap-instrument notional amount is reduced.

We assess effectiveness of the hedge instrument regularly. The ineffective portion of the gain or loss, if there is one, would impact earnings as it occurs. There is no ineffective portion of the outstanding swap as of April 30, 2010.

Note 6: Contractual Obligations

The following table sets forth our contractual obligations as of April 30, 2010 (in thousands).

	Payments due by period

Fiscal Year	Total	1 Year	2 Years	3 Years	4 Years	5 Years or More
Operating lease obligations	$28,867	$7,618	$6,959	$4,038	$3,847	$6,405
Loan obligations – principal	3,214	1,429	1,429	356	—	—
Pyxis Earn-Out	3,750	3,750	—	—	—	—
Seismic Earn-Out	2,047	2,047	—	—	—	—
Purchase obligations	3,835	3,835	—	—	—	—
Total	$41,713	$18,679	$8,388	$4,394	$3,847	$6,405

Our operating lease obligations consist of non-cancelable lease agreements for our facilities, which expire at various dates between fiscal years 2010 and 2016. Certain leases contain escalation clauses and requirements for the payment of property taxes, insurance, and maintenance expenses.

The Seismic Earn-Out represents the fair value of the contingent liability recorded as part of the acquisition of Seismic on April 28, 2010. If achieved, the maximum undiscounted payment of $2.5 million will be paid in cash.

The Pyxis Earn-Out represents the maximum contingent consideration that could be paid to the former shareholders of Pyxis, based upon the achievement of the targets identified in the purchase agreement dated September 1, 2009. The Pyxis Earn-Out will be recognized in the period that the contingency is resolved. Eighty-four percent of the Pyxis Earn-Out, if achieved, will be paid in AST stock and the remaining portion will be paid in cash.

We do not have any off-balance sheet arrangements with unconsolidated entities or related parties, and, accordingly, our liquidity and capital resources are not subject to off-balance sheet risks from unconsolidated entities.

Note 7: Segment Reporting

We have reviewed our business operations and determined that we operate in a single homogeneous business segment. We sell similar products and services with similar economic characteristics to similar classes of customers, primarily to the United States Government, its agencies, or prime contractors for the United States Government. We have integrated the companies that we have acquired into our existing operating and financial reporting structure. Our CEO, who is the chief decision maker of our operations, reviews aggregate financial information for the Company as a whole. As the technologies and the operations of our divisions are highly integrated, he makes resource allocation decisions based on this aggregate financial information.

Note 8: Provision for Income Taxes

Our provision for income taxes for the second quarter and first six months of fiscal year 2010 was approximately $2,128,000 and $4,180,000, respectively, with an estimated annual effective tax rate of 39.5%. Our provision for income taxes for the second quarter and first six months of fiscal year 2009 was approximately $2,450,000 and $4,695,000, respectively, with an estimated annual effective tax rate of 38.6%.

In general, our income tax returns are subject to examination by United States federal tax authorities for tax years 2005 onward and by various United States state tax authorities for tax years 2004 onward.

The balance of our liability associated with gross unrecognized tax benefits was approximately $211,000 at April 30, 2010, and October 31, 2009. Accrued interest associated with the gross unrecognized tax benefits was approximately $12,000 and $6,000 at April 30, 2010, and October 31, 2009, respectively.

Based on the terms of the acquisitions of Pyxis and Seismic, we are able to amortize the combined acquired goodwill balance of $34,718,000 over a fifteen-year period from the date of acquisition for federal tax purposes.

Note 9: Contingencies

Product warranties. Our products are warranted against defective workmanship and materials for a period of one year from the date of acceptance by the original purchaser. Warranty expense in the second quarter and first six months of fiscal year 2010 was approximately $80,000 and $175,000, respectively. For the same periods of fiscal year 2009, warranty expense was approximately $20,000 and $34,000, respectively.

Guarantees. From time to time, we enter into certain types of contracts that contingently require us to indemnify parties against third-party claims. These contracts primarily relate to (i) certain real estate leases, under which we may be required to indemnify property owners for environmental and other liabilities, and other claims arising from our use of the applicable premises; and (ii) certain agreements with our officers, directors, and employees under which we may be required to indemnify such persons for liabilities arising out of their employment relationship. The terms of such obligations vary. Generally, a maximum obligation is not explicitly stated. Because the obligated amounts of these types of agreements often are not explicitly stated, the overall maximum amount of the obligations cannot be reasonably estimated. Historically, we have not been obligated to make significant payments for these obligations, and no liabilities have been recorded for these obligations on the balance sheets as of April 30, 2010, or October 31, 2009.

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. 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.

On March 11, and July 19, 2005, purported securities class action complaints were filed in the United States District Court, Northern District of California. The cases were considered as *In re Applied Signal Technology Inc. Securities Litigation*, Master File No. 4:05-cv-1027 (SBA). The amended consolidated complaint is brought on behalf of a putative class of persons who purchased our Company’s securities during a class period of August 24, 2004, through February 22, 2005. The complaints name us, our former Chief Executive Officer, and our Chief Financial Officer as defendants, and allege that false and misleading statements regarding us were issued during the class period. The parties have agreed to a settlement, which will be paid by our insurers. On August 3, 2009, the District Court gave final approval to a settlement of this case. A purported appeal of a ruling denying a motion to intervene has been filed.

On August 12, 2008, a purported shareholder derivative action was filed in the Superior Court, State of California. *Shoemaker v. Devine et al.*, No. 1:08-CV-119810. It is brought on purported behalf of the Company, against current and former members of the Board of Directors, our Chief Financial Officer, and our former Chief Executive Officer, asserting that these individuals breached their fiduciary duties, based on essentially the same allegations as the class action case. On May 13, 2010, the Court gave preliminary approval to a proposed settlement of the case, under which the Company will adopt certain corporate governance measures, and set a hearing date to consider final approval.

On May 18, 2009, we filed a complaint for patent infringement in the United States District Court for the Northern District of California, Case Number 3:09-cv-2180-SBA, against Emerging Market Communications, Paradise Datacom LLC, and ViaSat, Inc. On June 12, 2009, we filed an amended complaint adding EMC Satcom Technologies, Inc. as a defendant. All of the defendants have been served with the complaint and have answered; each asserts standard patent case defenses. On October 15, 2009, ViaSat, Inc. filed a counterclaim against us for infringement of two patents. On November 9, 2009, we answered those counterclaims, denying infringement and alleging that the ViaSat patents are invalid. On May 14, 2010, ViaSat amended its counterclaims against us to assert a third patent and to add third-party claims for patent infringement against our licensee, Comtech EFData. A claim construction hearing is scheduled for December 2, 2010. No trial date has been set. The Court referred the parties to a settlement conference with a Magistrate Judge in the Northern District of California. During a settlement conference with ViaSat, the parties were unable to come to a resolution. A settlement conference with Emerging Market Communications and EMC Satcom Technologies is scheduled for July 22, 2010. If we are unable to come to a resolution of the patent infringement claims with the defendants, we will continue to vigorously pursue our claims and defenses.

Item 2: Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following information should be read in conjunction with the attached condensed financial statements and notes thereto, as well as our Annual Report on Form 10-K for the year ended October 31, 2009.

This quarterly report on Form 10-Q 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 in this document under “Item 1A, Risk Factors.” 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).

Description of Business

Applied Signal Technology, Inc. (AST) is a leading provider of advanced intelligence, surveillance, and reconnaissance (ISR) solutions to enhance global security. We provide systems, products, and services in the areas of communications, signals intelligence (SIGINT), cyber intelligence, and sensor signature processing. Our communication capabilities include the development and production of communication support products, bandwidth compression software, and network management software. Our SIGINT competencies include communications intelligence (COMINT) and electronic intelligence (ELINT). Our cyber intelligence capabilities include high-speed network monitoring, deep packet inspection, and high-end software engineering services. Our sensor signature expertise includes processing information from electro-optic, sonar, radar, magnetic, and chemical sensors to detect changes in the environment.

We specialize in the collection, processing, and understanding of signals for ISR missions with low size, weight, and power configurations to enable increased deployment on unmanned platforms. We develop and manufacture sophisticated sensors and digital signal processing equipment that use advanced software. Our primary customers are the United States Government and defense industry prime contractors for the United States Government.

Our sophisticated products, systems, and services help resolve our customers' most critical national security and signal collection issues. We provide advanced ISR solutions that allow our nation to prepare for, prevent, evaluate, and respond to foreign and domestic threats. Our specific capabilities include:

- ***Broadband Network Communications***. Our broadband communication technology provides secure, high-speed communication networks to Government customers. Our solutions enable private networks to operate at the highest communication rates while simultaneously monitoring and scanning all channels to prevent disruptions to network quality of service. We also provide bandwidth compression technology to maximize performance for satellite communications.
- ***Cyber Intelligence***.Our specialized systems, software, and analytics address sophisticated cyber space threats by creating a unique blend of proprietary intelligence techniques and advanced computer network solutions. We are developing a suite of high capacity network monitoring products to provide deep packet inspection to protect against the threat of cyber attacks. These complex systems identify and localize illicit activity on communication networks and provide the analysis and visualization tools necessary to produce meaningful results in time to make a difference.
- ***Tactical COMINT***. Our tactical COMINT solutions include deployment of ground-based and airborne payloads for the detection, identification, location, and tracking of mobile communications and weapons systems. The AST product portfolio includes man-portable, airborne, remote/unattended, and system-level solutions for both strategic and tactical missions. Our systems are wideband digital systems that utilize signal processing technology to deliver superior performance against conventional and modern signals, even in the most challenging signal environments.
- ***Electronic Warfare(EW)***. Our EW solutions detect, identify, and counter adversary weapons and sensor systems by collecting signals from electronic emitters. We have developed a suite of ELINT and electronic support measures (ESM) to derive intelligence from signals associated with weapons systems. This equipment is able to scan the radar bands associated with weapons systems and determine the type of system and its precise location for battlefield characterization and force protection. To date, we have derived a limited amount of revenue from the sale of our ELINT products.
- ***Sensor Surveillance***. Our specialized sensors and signature processing observes changes in the environment that can provide an indication of activities of concern to global security. Sensor signatures addressed by AST include the use of sound, such as in sonar or radar, to detect mines or submarines; detection of chemicals to expose explosive devices; and detection of magnetic materials that might indicate the presence of buried mines or underground weapons facilities. Our sensor processing equipment provides automatic detection and classification of threatening objects in both marine and terrestrial environments.
- ***Mission Planning and Support***. We provide software-based management systems that provide the tasking and planning of deployed sensors and collection systems to conduct operations, training, and sustainment. We also provide mission management of deployed systems.
- ***Professional Services***. We perform high-end engineering services for Government product development and operationally deployed systems. Examples of these services include: software engineering development of service-oriented architectures; system-level performance evaluation and modeling; system integration; field support; and customer training in the use of our standard products.

Substantially all of our revenues are from contracts with the United States Government or prime contractors to the United States Government.

Overview

We believe funding of the United States defense budget is slowing relative to the prior five-year period as a result of anticipated decreases in supplemental budgets and pressures from other Government spending priorities. Despite these potential declines in overall defense spending, we believe that interest in intelligence, surveillance, and reconnaissance (ISR) by the United States Government will remain strong to respond to the continuing threat of terrorist activities and irregular warfare campaigns.

As we look ahead, we believe that spending levels in our high-demand niche categories of procurement will remain strong. We are a full-service provider of ISR products, systems, and services, serving the defense, intelligence, and homeland security markets. We believe these core markets have strong growth potential and that we are well positioned to benefit from defense spending in these areas. Since the beginning of fiscal year 2009, we have strengthened our product development pipeline and debuted three new products: a broadband network analysis product for cyber surveillance, a tactical wireless reconnaissance product capable of exploiting modern communication signals, and a towed high definition sonar system for undersea port and harbor surveillance.

We have a firm foundation in broadband communications and anticipate continued strong activity in this core market. Over the next several years, we anticipate growth opportunities in tactical SIGINT and cyber intelligence as the Government recapitalizes its existing equipment with new technology and develops an integrated response to emerging cyber security threats. We continue to focus our operations on delivering strong program performance, meeting staffing requirements, maintaining a competitive cost structure, and expanding our marketplace. Our customers continue to come to us with new requirements for ISR solutions, weighted heavily toward new development efforts. A significant portion of our revenue continues to be generated by cost-reimbursable contracts that tend to be developmental in nature, and require highly specialized, technical skill sets. We believe that this trend will continue through the remainder of fiscal year 2010.

Our diluted earnings per share for the second quarter of fiscal year 2010 was $0.24, compared to $0.31 for the same quarter of fiscal year 2009. Our diluted earnings per share for the first six months of fiscal year 2010 was $0.48, compared to $0.58 in the same period of fiscal year 2009. The decline in our diluted earnings per share is primarily due to expenses incurred during fiscal year 2010, associated with the acquisitions of Seismic and Pyxis Engineering. In addition, during the first quarter of fiscal year 2009, we implemented a new multi-rate structure which reduced the cost of our product offerings and changed the method of allocating indirect expenses to fixed-price contracts. The change in the method of allocating indirect expenses to fixed-price contracts increased operating income by approximately $450,000.

Acquisition of Seismic. On April 28, 2010, we acquired all of the outstanding membership interests in Seismic, LLC, and accounted for this purchase in accordance with the revised accounting standard for business combinations. Seismic has been engaged in cyber security solutions, software engineering, data management, and systems engineering and integration services for the Department of Defense and Intelligence Community. We believe this acquisition will complement our existing software and network services business in the defense and intelligence communities. In addition, we believe this acquisition will allow us the opportunity to expand our software and network services business into the emerging cyber security market.

The amount of goodwill recorded for the Seismic acquisition at April 30, 2010, was approximately $21.5 million and reflected the value of the future engineering services revenue opportunities associated with the cyber security marketplace.

The preliminary purchase price as of April 30, 2010, was approximately $26.7 million, which includes cash consideration of $24.7 million and contingent consideration of approximately $2.0 million. Approximately $4.9 million that would otherwise be distributed to the sellers at the closing was deposited into an escrow account to provide a fund against which we may make claims for damages, if any, based on the breaches of the representations made by Seismic in the purchase agreement. Fifty percent of the escrow account will be released on the one-year anniversary of the closing date and the remainder in 18 months from the closing date, net of any claims made by us against Seismic or the sellers under the te rms of the purchase agreement.

The sellers are entitled to additional, contingent consideration (the Seismic Earn-Out) based upon the performance of the business acquired from Seismic during the six-month period ending October 31, 2010 (the Initial Earn-Out Period), and the following six-month period ending April 30, 2011 (the Subsequent Earn-Out Period). The Seismic Earn-Out is based on several key factors including the revenue recorded during both the Initial and Subsequent

Earn-Out Periods, program fees earned during the Initial Earn-Out Period, and the backlog measured on the last day of the Initial Earn-Out Period.

If total revenues that we generate from the acquired Seismic business, as defined in the purchase agreement, are in excess of $23 million during the Earn-Out Period, we will pay the sellers 51.5% of such excess up to a maximum of $2.58 million for revenues of $28 million or more.

If program fees exceed 12% during the Initial Earn-Out Period, there will be no reduction to the payout (based on revenue recorded). If program fees are less than 9% during the Initial Earn-Out Period, no Earn-Out Distribution Amount shall be paid.

If backlog measured on the last day of the Initial Earn-Out Period is greater than $10 million, there will be no reduction to the payout (based on revenue recorded). If backlog measured on the last day of the Initial Earn-Out Period is less than $5 million, no Earn-Out Distribution Amount will be paid.

We recorded a liability of $2.0 million reflecting the fair value of the anticipated Seismic Earn-Out. The fair value was estimated by using the expected cash flow approach with revenue inputs being probability-weighted by using a discount rate of 5.6%. Changes in the fair value of the contingent liability will be recognized in earnings in the period of the change through the settlement of the liability on April 30, 2011. The fair value of the Seismic Earn-Out was also included in the preliminary purchase price.

Certain employees of Seismic are eligible to receive bonus payments up to a maximum total of $2.4 million upon achievement of performance targets. The performance targets include the achievement of the Seismic Earn-Out, as well as individual goals related to employee retention, minimum hiring levels, and new customer relationships. These bonus payments also include a two-year service requirement from the recipients, with fifty percent of the bonus to be paid after one year of service and the remaining portion to be paid at the end of the service period.

In addition, substantially all of the Seismic employees are eligible to receive retention bonus payments if they remain employees of Applied Signal Technology, Inc. through the one-year anniversary of the acquisition. The aggregate amount that could be paid is approximately $1.1 million.

We incurred approximately $901,000 and $911,000 of transaction costs during the second quarter and first six months of fiscal year 2010, respectively. These costs are included in general and administrative expenses within our statement of operations.

Critical Accounting Policies and Estimates

General. Our discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements. These condensed consolidated 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 materially 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 condensed consolidated financial statements and, therefore, consider these to be critical accounting policies. See “Notes to Condensed Consolidated Financial Statements, Note 1: Summary of Significant Accounting Policies,” included elsewhere in this report for more information about these critical accounting policies, as well as descriptions of other significant accounting policies.

Revenues and cost recognition. Our contracts are executed through 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. The majority of our contracts are accounted for following the

authoritative guidance for construction-type and production-type contracts. We recognize revenue on a limited number of standalone software contracts following the guidance for software revenue. For these software contracts, we defer revenue that is related to billings and customer payments in advance of the completion of the performance requirements set forth in these contracts.

As a supplier to the United States Government, we are required to 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. Among the causes for suspension are violations of various statutes, including those related to procurement integrity, export control, United States Government security regulations, employment practices, protection of the environment, accuracy of records in the recording of costs, and foreign corrupt practices. The Government may investigate and make inquiries of our business practices and conduct audits of contract performance and cost accounting. The Government audits and investigations can take several years to complete. Depending on the results of these audits and investigations, the Government may make claims against us or take exception to certain costs we determined to be recoverable. In the period management determines recoverability is not likely, reserves are established for the estimated loss by a charge to operating income.

We account for cost-reimbursement contracts by charging actual labor, materials, and other direct costs, plus estimated indirect costs of operations as incurred, including overhead, R&D, and general and administrative expenses (incurred costs). Stock compensation expense is not reimbursable under these contracts. Beginning in the first quarter of fiscal year 2009, we apply indirect costs to all subcontract costs.

We recognize contract revenues and profits on cost-reimbursement contracts by applying an estimated fee rate to all incurred costs on an individual contract basis. Fee calculations are based on either negotiated fee amounts or management’s assessment of the fee amounts that are likely to be earned. On cost-reimbursement contracts, we may bear unexpected cost increases for purposes of maintaining customer relationships. Historically, the effect on operating results and financial condition from cost-reimbursement losses has been minimal.

Our policy for recognizing interim award fees 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 thereof will be earned, on a contract-by-contract basis. Management bases its assessments 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 in whole or in part until management determines that it is probable that the award fee or portion thereof will be earned. Historically, management’s estimates have generally been consistent with the actual fees awarded. However, changes in facts and circumstances could arise within an award fee period, causing management to either lower or raise the award fee estimate in the period in which the changes occur.

Our time-and-materials contracts are performed on a level-of-effort basis. We recognize revenue for these contracts by applying a negotiated billing rate to the level of effort.

We account for fixed-price contracts by using the percentage-of-completion method. Under this method, we charge labor, materials, and other direct costs, plus estimated indirect costs of operations, as they are incurred. Each period, we recognize as revenue 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 costs incurred and the estimated costs to complete. On fixed-price contracts, we bear the risk of any 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; and these costs could have a materially adverse effect on our results of operations.

For those contracts in which all of the terms have not yet been finalized, revenue does not include an estimated fee rate on cost.

Project management reviews contract performance, costs incurred, and estimated completion costs regularly. We adjust revenues and profits on all contracts in the period in which changes, including anticipated losses, become estimable or determinable.

Precontract costs represent costs incurred in anticipation of specific expected future contract awards and costs incurred in connection with ongoing contracts for which contract modifications have not been defined or completed at the end of the reporting period. These costs are included in other current assets on the balance sheet. Precontract costs incurred at April 30, 2010, and October 31, 2009, were approximately $1,964,000 and $1,139,000, respectively. Approximately $1,106,000 of the October 31, 2009, balance was recognized as revenue during the six months ended April 30, 2010.

We have one royalty licensing agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Royalties contributed approximately $1,944,000 and $3,411,000 to revenues and operating income during the second quarter and first six months of fiscal 2010 and contributed $1,882,000 and $3,579,000 to revenues and operating income during the second quarter and first six months of fiscal 2009.

Indirect rate variance adjustment to operations. We record contract revenues and costs of operations for interim reporting purposes based on annual targeted indirect rates. During our interim reporting periods, variances may accumulate between the actual indirect rates and the annual targeted rates. Timing-related indirect spending variances are removed from contract costs, research and development, and general and administrative expenses, and are included in inventory as part of work in process during these interim reporting periods. These rates are reviewed regularly, and we record adjustments for any material, permanent variances in the period they become estimable. We believe that this estimate is the preferred practice used within our industry. At year-end, we adjust the revenues and costs for actual indirect rates. At the beginning of fiscal year 2009, we implemented a new rate structure, which changed the application of certain general and administrative expenses to contracts which created a one-time increase to operating income of approximately $450,000 from fixed-price contracts.

Our accounting policy for recording indirect rate variances is based on management’s belief that variances accumulated during interim reporting periods will be absorbed by expected contract activities during the remainder of the year. We consider the rate variance to be unfavorable when our actual indirect rates are greater than our annual targeted rates. In contrast, a favorable rate variance occurs when our actual indirect rates are lower than our annual targeted rates. During interim reporting periods, unfavorable rate variances are recorded as reductions to operating expenses and increases to work-in-process inventory. We record favorable rate variances as increases to operating expenses and decreases to work-in-process inventory.

If we anticipate that actual contract activities will be different than planned levels, there are alternatives we can utilize to reduce the variance: we can adjust some of our planned indirect spending during the year we can request a modification of our billing rates to our customers through the Defense Contract Audit Agency any time during the year, in accordance with Federal Acquisition Regulations, or we can record adjustments to expense based on estimates of future contract activities for the remainder of the fiscal year.

If our rate variance is unfavorable, the modification of our billing rates will likely increase revenue and operating expenses, and decrease the unfavorable indirect rate variance accumulated in inventory. Fee percentages on fixed-price and time-and-materials contracts will generally decline as a result of any increase to indirect costs. Fee percentages on active cost-reimbursable contracts will generally be unaffected as a result of any increase to indirect costs. Fee percentages on completed cost-reimbursable contracts will generally be reduced. If our rate variance is favorable, in general, the modification of our billing rates will decrease revenue and operating expenses, and decrease the favorable indirect rate variance accumulated in inventory. In this event, fee percentages on fixed-price and time-and-materials contracts will generally increase. Fee percentages on cost-reimbursable contracts will generally be unaffected as a result of any reduction to indirect costs, due to the fact that programs will typically expend all of the

funds available. Any impact on operating income, however, will depend on a number of other factors, including mix of contract types, contract terms, anticipated performance on specific contracts, and anticipated changes in inventory.

At April 30, 2010, the unfavorable rate variance was approximately $98,000 and at May 1, 2009, the unfavorable rate variance was approximately $115,000.

Inventory valuation and disposal. We provide advanced digital signal processing products and systems to the United States Government. Typical life cycles of our products are eight to ten years or more. In addition, we maintain spare parts in order to repair the equipment. We evaluate our inventory quarterly, at interim reporting periods, and assess our ability to sell our products, which includes raw materials. Historically, we have sold our inventory at or above cost, so there was typically no decrement in valuation. When we determine a product has reached the end of its life cycle or there is no longer a need for a certain product, typically, we will dispose of any remaining inventory, and record the associated reduction to inventory. Historically, any disposals of raw materials represent a minor amount. These disposals are included in general and administrative expenses on the statement of operations because we use raw materials in a variety of situations other than contract costs, including R&D. Disposals of other obsolete inventory and raw materials were not significant during the first six months of fiscal years 2010 and 2009.

If we determine that the estimated market value of certain inventory is below cost, we will write down the inventory to the estimated market value. We did not write down any inventory during the first six months of fiscal year 2010. During the three-month and six-month period ended May 1, 2009, we recorded an inventory write-down of approximately $422,000 to reflect the estimated market value of one inventoried product. Subsequent sale of inventory that has been subject to a write-down has not been significant to date.

Income taxes. We estimate our income taxes in each of the taxing jurisdictions in which we operate. Our effective tax rate can differ from the statutory rate primarily due to research and development credits and tax exempt interest, offset by the non-tax-deductible nature of meals and entertainment expense and certain types of stock-based compensation expense. In addition, our process involves estimating our current tax expense together with assessing any temporary differences resulting from the different treatment of certain items, such as the timing for recognizing certain expenses, for tax and accounting purposes. These differences may result in deferred tax assets and liabilities, which are included in our consolidated balance sheet. We are required to assess the likelihood that our deferred tax assets, which included our net operating loss carryforwards and temporary differences that are expected to be deductible in future years, will be recoverable from future taxable income or other tax planning strategies. If recovery is not likely, we have to provide a valuation allowance based on our estimates of future taxable income in the various taxing jurisdictions, and the amount of deferred taxes that are ultimately realizable. The provision for current and deferred taxes involves evaluations and judgments of uncertainties in the interpretation of complex tax regulations by various taxing authorities. Actual results could differ from our estimates.

We also recognize the impact of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than 50% likelihood of being sustained.

We record interest or penalties related to income taxes as a component of income tax expense in our financial statements.

Please refer to “Notes to Consolidated Financial Statements, Note 8: Provision for Income Taxes” for further information.

Price redetermination. As a Government contractor, we are subject to price redetermination on certain fixed-price contracts if it is determined that we did not price our products and services consistent with the requirements of the Federal Acquisition Regulations. During the first six months of fiscal years 2010 and 2009, we did not incur any price redeterminations on any of our contracts.

Business combination. Effective at the beginning of our fiscal year on November 1, 2009, we adopted the revised accounting standard, *Business Combinations* (ASC Topic 805). The revised standard retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It requires that contingent consideration be recognized at fair value at the date of the acquisition, and requires the capitalization of in-process research and development at fair value, and the expensing of acquisition-related transaction costs as incurred.

We allocated the purchase prices of Pyxis and Seismic to the tangible and intangible assets acquired, and liabilities assumed based on their estimated fair values. We engaged a third-party appraisal firm to assist management in determining the fair values of certain assets acquired and liabilities assumed and the fair value of the contingent consideration payable to the former shareholders of Seismic (the Seismic Earn-Out). The valuation required management to make significant estimates and assumptions, especially with respect to intangible assets and the Seismic Earn-Out.

Management made estimates of fair value based upon assumptions believed to be reasonable. These estimates were based on historical experience and information obtained from the management of the acquired companies and are inherently uncertain.

Critical estimates in valuing the contingent consideration for the Seismic Earn-Out included the probability of achieving target levels of revenues for the acquired business. In accordance with the revised standard for business combinations, the fair value of the Seismic Earn-Out was included as part of the initial purchase price, and will be remeasured at each subsequent balance sheet date. The subsequent adjustments to fair value will be recorded to operating expense.

Critical estimates in valuing certain of the intangible assets included, but were not limited to, future expected cash flows from funded backlog, unfunded backlog, future contracts, and non-compete agreements. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates, or actual results.

Goodwill valuation. We test goodwill for possible impairment on an annual basis, as of the first day of the fourth quarter, and at any other time if events occur or circumstances indicate that the current carrying amount of goodwill may not be recoverable. Circumstances that could trigger an impairment test include, but are not limited to, a significant adverse change in the business climate or legal factors, an adverse action or assessment by a regulator, unanticipated competition, and loss of key personnel.

The determination as to whether a write-down of goodwill is necessary involves significant judgment based on the short-term and long-term projections of future performance as well as the estimation of discount rates.

To perform the goodwill impairment test, we determine the fair value of the reporting unit and compare the fair value to the reporting unit’s carrying value. We believe AST is one reporting unit, and therefore, we compare the fair value of AST to the total net asset value on our balance sheet. If our total net asset value were to exceed our fair value, we would perform the second step of the impairment test. In the second step, we would compare the implied fair value of our goodwill to our carrying amount, taking a write-down to the extent the carrying amount exceeds the implied fair value. If the fair value of AST exceeds the carrying value of our net assets under step one, then no impairment is indicated and the test is complete.

There were no indicators of impairment as of April 30, 2010.

Long-lived asset valuation (property, plant and equipment, and intangible assets). We test long-lived assets or asset groups for recoverability when events or changes in circumstances indicate that their carrying amount may not be recoverable. Circumstances that could trigger a review include, but are not limited to, significant decreases in the market price of the asset, significant adverse changes in the business climate or legal factors, accumulation of costs

significantly in excess of the amount originally expected for the acquisition or construction of the asset, current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset, and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.

We assess recoverability based on the carrying amount of the asset and its fair value, which is generally determined based on the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the asset. We recognize an impairment loss when the carrying amount is not recoverable and exceeds fair value.

There were no indicators of impairment as of April 30, 2010.

Share-based payment. We adopted the current accounting standard related to share-based payment in fiscal year 2006. We elected to use the modified prospective transition method. Stock-based compensation expense for equity awards granted subsequent to November 1, 2005, was based on the grant-date fair value estimated in accordance with the provisions of the new standard. For awards granted prior to, but not yet vested, as of November 1, 2005, stock-based compensation expense was based on the grant-date fair value previously estimated in accordance with the prior accounting standard. We recognize the stock compensation expense over the requisite service period of the award, which generally equals the vesting period of each grant.

We have an Employee Stock Purchase Plan (ESPP). For offering periods subsequent to December 1, 2008, the purchase price for participants is 95% of the closing stock price on the date of purchase, and therefore, the ESPP is non-compensatory. For offering periods beginning prior to December 1, 2008, the ESPP allowed employees to purchase shares of common stock at 85% of the closing stock price at the lower of either the date of enrollment or the date of purchase. The remaining expense related to the final compensatory award under the ESPP was recognized in the first quarter of fiscal year 2009.

The following table sets forth the total stock-based compensation expense resulting from stock options, restricted stock, and ESPP activity included in our condensed consolidated statements of operations (in thousands, except share data).

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Contract costs	$298	$260	$616	$663
Research and development	12	15	24	36
General and administrative	192	176	409	369
Stock-based compensation expense before income taxes	$502	$451	$1,049	$1,068
Income taxes	(185)	(149)	(377)	(328)
Stock-based compensation expense after income taxes	$317	$302	$672	$740

Please refer to “Notes to Condensed Consolidated Financial Statements, Note 1: Summary of Significant Accounting Policies, Stock-Based Compensation” for additional information.

Fair value measurements. The fair value accounting standard defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. It also establishes a framework for measuring fair value. We adopted the requirements of the fair value standard as they relate to certain non-financial assets and liabilities on November 1, 2009. This adoption did not have a material impact on our results of operations, financial position, or cash flows.

The standard on fair value measurement establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

- ***Level 1***. Quoted (unadjusted) prices in active markets for identical assets or liabilities
- ***Level 2***. Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data
- ***Level 3***. Unobservable inputs that are supported by little or no market activity and are significant to the measurement of the fair value of the assets or liabilities.

The following table presents information about the Company's financial assets and liabilities measured at fair value on a recurring basis (in thousands).

	April 30, 2010			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets				
Cash equivalents				
Money market funds	$1,803	$—	$—	$1,803
Available-for-sale securities:				
Short-term municipal	—	10,010	—	10,010
Long-term municipal	—	1,062	—	1,062
Total assets	$1,803	$11,072	$—	$12,875
Liabilities				
Contingent consideration	—	—	$2,047	$2,047
Interest rate swap	—	82	—	82

Total liabilities	$—	$82	$2,047	$2,129

	October 31, 2009		
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Total Fair Value
Assets			
Cash equivalents			
Money market funds	$2,028	$—	$2,028
Available-for-sale securities:			
Short-term municipal	—	43,454	43,454
Long-term municipal	—	2,129	2,129
Total assets	$2,028	$45,583	$47,611
Liabilities			
Interest rate swap	$—	$116	$116
Total liabilities	$—	$116	$116

As of April 30, 2010, our investment portfolio did not include investments in assets using Level 3 inputs, and we do not intend to purchase such investments in future periods.

Our money market funds are priced by using unadjusted prices in active markets for identical assets.

We determine the fair values of our municipal securities by using pricing models with inputs that are observable in the market or can be derived principally from or corroborated by observable market data, such as municipal yield curves and credit ratings.

We have a contingent consideration liability that is payable to the shareholders of Seismic. We recorded $2.0 million in other accrued liabilities in our consolidated balance sheet based on future revenues projected over a one-year period from the date of acquisition of April 28, 2010. We estimated the fair value of this liability by using the expected cash flow approach with revenue inputs being probability-weighted. Please refer to “Notes to Consolidated Financial Statements, Note 3: Business Combinations” for further information on the terms of the agreement as it pertains to the contingent consideration.

The inputs used to value the interest rate swap liability are based on observable market data such as the London Inter-Bank Offered Rate (LIBOR) swap rate (floating interest rate), a fixed rate (term loan interest rate), a discount factor, and a calculation of a present value of the interest paid/received based on the expected loan principal. Please refer to " Notes to Consolidated Financial Statements, Note 5: Borrowing Arrangements" for further information.

Three and Six Months Ended April 30, 2010, Compared to Three and Six Months Ended May 1, 2009

Revenues and backlog. Revenues for the second quarter of fiscal year 2010 were approximately $58,163,000, an 8.7% increase from revenues of approximately $53,500,000 recorded in the second quarter of fiscal year 2009. During the first six months of fiscal year 2010, revenues were approximately $106,243,000, compared to revenues of $98,884,000 for the same period in fiscal year 2009. Revenues generated by our development programs increased by approximately $7,833,000 during the second quarter of fiscal year 2010, compared to the same period in fiscal year 2009. The increase was due to an increase in our broadband and network intelligence areas. The increase in our development programs was offset by a decrease in product sales by approximately $3,232,000 during the second quarter of fiscal year 2010, compared to the same period of fiscal year 2009. The decrease was primarily attributed to a decline in sales of our Model 680 Raider product.

We have one royalty licensing agreement for which we accrue royalties on sales of our licensed product by a third party. Since there are essentially no costs associated with this agreement, operating income will increase by the same amount of revenue that we recognize. Royalties contributed approximately $1,944,000 and $1,882,000 to revenues and operating income during the second quarter of fiscal year 2010 and 2009, respectively. During the first six months of fiscal year 2010, our royalty income was approximately $3,411,000, compared to approximately $3,579,000 during the same period of fiscal year 2009.

New orders received during the second quarter of fiscal year 2010 were approximately $70,628,000, an increase of approximately 25.1% from approximately $56,454,000 in new orders received during the same period of fiscal year 2009. New orders for the first six months of fiscal year 2010 were $100,650,000, representing a 12.4% increase when compared to new orders of $89,575,000 for the same period of fiscal year 2009. New orders increased primarily due to strong demand for our development efforts in our broadband and network intelligence areas.

Our backlog consists of the uncompleted portions of existing contracts (excluding unexercised contract options). At April 30, 2010, ending backlog was approximately $166,020,000, representing a 19.4% increase from the ending backlog of approximately $139,108,000 at October 31, 2009. This balance includes the backlog acquired from Seismic of approximately $32,095,000. Reported backlog includes both funded and unfunded portions of contract values. There is no assurance or obligation that contracts will be fully funded. To the extent that contracts are not fully funded, there will be a reduction to backlog in a future period.

Our contracts can be fixed-price contracts, where we agree to deliver equipment or services for a fixed price and assume the risk of cost overruns; cost-reimbursement contracts, where we are reimbursed for our direct and indirect costs and paid a negotiated profit; or time-and-materials contracts, where we recognize revenue for these contracts by applying a negotiated billing rate to the level of effort. Cost-reimbursement and time-and-materials contracts typically do not return as high a profit margin as fixed-price contracts, and accordingly, our profit margin will be affected by the mix of our orders by contract type.

The following table represents our revenue concentration during the respective periods by contract type.

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Cost-reimbursement contracts	78%	61%	76%	61%

Time-and-materials contracts	10%	21%	11%	20%
Fixed-price contracts	9%	15%	10%	15%
Royalty contracts	3%	3%	3%	4%
	100%	100%	100%	100%

The following table represents the revenue concentration from significant contracts during the respective periods. Due to security requirements of the United States Government, we are unable to disclose the actual contract names. Therefore, for the ease of the reader, we have renamed these contracts for reporting purposes in the table below.

	Three Months Ended		Six Months Ended	
	April 30, 2010	May 1, 2009	April 30, 2010	May 1, 2009
Next Generation ASA	20%	—	20%	—
Thunderdome	11%	—	12%	—
Tiffany	11%	19%	11%	19%
ASA	—	17%	—	17%
High Beam	—	9%	—	11%
Stone Face II	—	5%	5%	6%
Specter	—	5%	—	—
Raider	—	—	—	5%
	42%	55%	48%	58%

a dash (—) designates less than 5% revenue concentration

The following contracts were indefinite-delivery-indefinite-quantity (IDIQ) contracts: Next Generation ASA, Tiffany, ASA, and Stone Face II. Under the terms of this type of contract, the Government may issue individual delivery orders (DOs) for goods or services that they require. Each DO is treated as a separate contract, which may be awarded on a cost-reimbursable, fixed-price, or time-and-materials basis. Typically, we aggregate the DOs under each IDIQ contract for purposes of distinguishing significant revenue concentrations. However, Thunderdome is a significant, individual DO within an IDIQ contract.

ASA is a time-and-materials contracts and Raider is a fixed-price. All of the other contracts referenced are cost-reimbursement contracts.

Contract costs. Contract costs consist of direct costs incurred in the performance of the contract, including labor, materials, and overhead costs. Contract costs were approximately $40,850,000, or 70.2 % of revenues, for the second quarter of fiscal year 2010 compared to approximately $37,489,000, or 70.1% of revenues, for the same period of fiscal year 2009. For the first six months of fiscal 2010, contract costs were approximately $74,850,000 or 70.5% of revenues, compared to $69,020,000 or 69.8% for the same period of fiscal year 2009. Contract costs increased in

absolute dollars and as a percentage of revenues during the second quarter and first six months of fiscal year 2010, compared to the same periods of fiscal year 2009 primarily due to an increase in activity associated with development contracts.

Research and development (R&D). Company-directed investment in research and development expenses for the second quarter of fiscal year 2010 were approximately $4,046,000, or 7.0 % of revenues, and were consistent with R&D expenses of approximately $3,797,000, or 7.1% of revenues, for the same period of fiscal year 2009. During the first six months of fiscal year 2010, R&D expenses were approximately $7,093,000, or 6.7% of revenues, compared to approximately $6,872,000, or 7.0% of revenues during the same first six months of fiscal year 2009.

General and administrative (G&A). General and administrative expenses include administrative salaries, costs related to marketing and proposal activities, costs associated with product warranties, and other administrative costs. We record G&A expenses based on annual targeted indirect rates applied to our quarterly revenue base, for interim reporting periods. G&A expenses were approximately $7,809,000, or 13.4% of revenues, for the second quarter of fiscal year 2010, compared to approximately $5,759,000, or 10.8% of revenues, for the same period of fiscal year 2009. During the first six months of fiscal year 2010, G&A expenses were approximately $13,648,000, or 12.9% of revenues, compared to approximately $10,889,000 or 11.0% of revenues, during the first six months of fiscal year 2009. G&A expenses increased in absolute dollars and as percentage of revenues during the second quarter and first six months of fiscal year 2010 primarily due to expenses related to the acquisitions of Seismic and Pyxis. We incurred Seismic transaction costs of approximately $901,000 and $911,000 during the second quarter and first six months of fiscal year 2010, respectively. The amortization of the Pyxis intangibles increased G&A expenses by approximately $174,000 and $349,000 during the second quarter and first six months of fiscal year 2010, as compared to the same period of fiscal year 2009. In addition, retention bonuses payable to the employees of Pyxis increased G&A expense by approximately $145,000 and $296,000 during the second quarter and first six months of fiscal year 2010, respectively.

Interest income and other, net. Net interest income for the second quarter of fiscal year 2010 was approximately $58,000, compared to net interest income of approximately $188,000 for the second quarter of fiscal year 2009. Interest income recognized during the first six months of fiscal year 2010 was approximately $147,000, compared to interest income of approximately $418,000 during the first six months of fiscal year 2009. The decrease is primarily due to lower average balances and yields in our investment portfolio.

Interest expense. Interest expense for the second quarter of fiscal year 2010 was approximately $92,000, compared to approximately $119,000 of interest expense in the second quarter of fiscal year 2009. Interest expense for the first six months of fiscal year 2010 was approximately $184,000, compared to interest expense of approximately $237,000 during the first six months of fiscal year 2009. Interest expense decreased during the second quarter and first six months of fiscal year 2010 primarily due to the reduction of the balance of our Term Loan with Wells Fargo through scheduled principal payments.

Provision for income taxes. Our provision for income taxes for the second quarter and first six months of fiscal year 2010 was approximately $2,128,000 and $4,180,000, respectively, representing an estimated 39.5% annual effective tax rate. Our provision for income taxes for the second quarter and first six months of fiscal year 2009 was approximately $2,450,000 and $4,695,000, respectively, with a 38.6% effective tax rate. The difference in our estimated annual effective tax rate at April 30, 2010, from our effective tax rate at May 1, 2009, was primarily due to a reduction in projected credits for research and development and tax-exempt interest.

Analysis of Liquidity and Capital Resources

Our primary sources of liquidity during the first six months of fiscal year 2010 were cash flows generated from operations, the issuance of common stock through exercise of options granted under our employee stock option plans, and stock purchases under our ESPP. We have reduced option grants in favor of restricted stock awards and have

modified our ESPP. As a result of the modification to our ESPP, participation has significantly declined. Cash received from the issuance of common stock under our ESPP may continue to decline in 2010

Net cash from operating activities. Net cash from operating activities has varied significantly from quarter to quarter. These quarter-to-quarter variances are primarily the result of changes in net income and operating assets and liabilities. Operating activities provided cash of approximately $2,719,000 and $2,282,000 during the first six months of fiscal years 2010 and 2009, respectively.

Net income for the first six months of fiscal year 2010 was approximately $6,435,000 compared to net income of approximately $7,589,000 for the comparable period of fiscal year 2009.

Accounts receivable balances decreased during the first six months of fiscal year 2010 by approximately $735,000 and increased by approximately $4,486,000 during the same period in fiscal year 2009. During the first six months of fiscal year 2010, we generated revenues of approximately $106,243,000 and collected approximately $106,773,000. During the first six months of fiscal year 2009, we generated revenues of approximately $98,884,000 and collected approximately $94,141,000.

Inventory, prepaid expenses, and other assets increased by approximately $5,517,000 and $2,281,000 during the first six months of fiscal years 2010 and 2009, respectively. The difference between the first six months of fiscal year 2010 and the first six months of fiscal year 2009 was due to inventory and precontract cost activities. During the first six months of fiscal year 2010, inventory balances increased by approximately $3,320,000, due to a combined increase to our work-in-process and finished goods inventory of approximately $3,242,000, in anticipation of future contracts. In addition, precontract costs increased other current assets by approximately $825,000 during the first six months of fiscal year 2010.

During the first six months of fiscal year 2009, inventory balances increased by approximately $1,476,000 due to an increase in our work-in-process inventory of approximately $1,473,000. The increase to work-in-process inventory was partially offset by a reduction due to an inventory write-down of approximately $422,000.

Accounts payable, taxes payable, accrued payroll liabilities, and other accrued liabilities balances decreased by approximately $3,450,000 and $2,413,000 during the first six months of fiscal years 2010 and 2009, respectively. Accounts payable declined by approximately $2,152,000 due to normal timing of vendor payments. Accrued payroll liabilities decreased during the first six months of fiscal year 2010 by approximately $3,063,000 due to bonus payments of approximately $4,397,000 accrued at the end of fiscal year 2009 and payments of approximately $1,077,000 for the bonus liability acquired from Pyxis. These payments were partially offset by the fiscal year 2010 bonus accrual of approximately $2,389,000. In addition, income taxes payable increased by approximately $1,691,000 primarily due to the fiscal year 2010 accrual of approximately $4,188,000, partially offset by income tax payments of approximately $2,265,000.

Accounts payable, taxes payable, accrued payroll liabilities, and other accrued liabilities balances decreased by approximately $2,413,000 during the first six months of fiscal year 2009. Accrued payroll liabilities decreased during the first six months of fiscal year 2009 by approximately $1,938,000 due to bonus payments of approximately $2,751,000, accrued at the end of fiscal year 2008, and payments for accrued vacation of approximately $1,181,000 due to a change in our vacation policy. These payments were partially offset by the fiscal year 2009 accrued bonus of approximately $2,217,000.

Net cash from investing activities. Net cash provided by investing activities during the first six months of fiscal year 2010 was approximately $7,508,000. Net cash used in investing activities during the same period of fiscal year 2009 was approximately $200,000.

During the second quarter of fiscal year 2010, we paid approximately $24,690,000 related to the acquisition of Seismic. We acquired cash of approximately $363,000 from Seismic.

During the first six months of fiscal year 2010, we purchased approximately $39,134,000 of investment securities; approximately $66,531,000 matured and $6,577,000 were sold. During the same period of fiscal year 2009, we purchased approximately $28,801,000 of investment securities and approximately $31,285,000 matured.

Net cash from financing activities. Net cash used in financing activities during the first six months of fiscal years 2010 and 2009 was approximately $4,591,000 and approximately $1,606,000, respectively. The sources of cash from financing activities were from the purchase of common stock under our ESPP and the cash received from stock option exercises. During the first six months of fiscal year 2010, cash from purchases under our ESPP declined by approximately $838,000 as compared to fiscal year 2009 due to less participation in our ESPP.

Term loan payments during the first six months of fiscal year 2010 included a payment of approximately $1,240,000 for the loan balance acquired from Seismic.

Our sources of cash are primarily from operating activities, employee stock activities, and investing activities. At April 30, 2010, we held in our investment portfolio approximately $11,072,000 of short-term and long-term municipal securities. Substantially all of our investments in the municipal securities are with AA/AAA/SP-1 (Standard & Poor's), Aa/Aaa/ MIG-1 (Moody's), and AA/AAA/F-1 (Fitch) rated issuers.

Our investment policy prohibits our investment in auction rate securities, mortgage-backed securities, and asset-backed securities. Insured municipal notes or bonds are also prohibited, with the exception of daily and weekly variable rate demand notes that contain a hard put feature.

Based on our ability to liquidate our investment portfolio and our expected operating cash flows, we do not anticipate any liquidity constraints as a result of the current credit environment.

We believe the primary risk to liquidity is the potential decrease in demand for our products and services. Historically, this demand has been influenced by the ISR needs of the United States Government.

We believe that the funds generated from operations, existing working capital, and the amount available under our existing line of credit will be sufficient to meet our cash needs for the next twelve months, including both the Pyxis and Seismic earn-out and compensation expenses.

Borrowing Arrangements

Revolving line of credit. We entered into a new revolving line of credit (Line of Credit) on February 22, 2010, under which Wells Fargo Bank (Wells Fargo) could advance funds to us, up to a maximum principal amount of $35 million. For borrowings under the new Line of Credit we will have the option to bear interest at either Wells Fargo's reference rate or at a fixed rate per annum equal to 2.5% above the London Inter-Bank Offered Rate (LIBOR), and interest on those borrowings is payable monthly. The Line of Credit will expire on February 12, 2012.

As a subfeature under the Line of Credit, Wells Fargo may issue standby letters of credit for us, provided that the aggregate amount of all outstanding letters of credit shall not at any time exceed $3,000,000. At April 30, 2010, we had three standby letters of credit under the Line of Credit, totaling approximately $1,407,000. The first letter of credit, related to our Sunnyvale, California, facilities lease, had a committed balance of approximately $1,221,000 at April 30, 2010. The second letter of credit was a requirement of our workers compensation insurance, and had a committed balance of approximately $150,000 at April 30, 2010. The third letter of credit, a requirement of one of our customers, had a committed balance of $36,000 at April 30, 2010. We do not pay interest on the amounts associated with the standby letters of credit.

As a result of the committed but unused funds associated with the three letters of credit, the total amount under the Line of Credit available for future letters of credit was $1,593,000 and the total amount available for borrowing was approximately $33.6 million at April 30, 2010. No fees or interest were associated with this unused portion.

As security for our indebtedness under the Line of Credit, we have granted to Wells Fargo a security interest in our inventory, equipment, and accounts receivable.

Term loan and interest rate swap. In connection with the 2005 acquisition of Dynamics Technology, Inc. (DTI), we entered into a term loan with Wells Fargo, in the original principal amount of $10 million, plus interest, the proceeds of which were used for acquisition financing (the Term Loan). The Term Loan bears interest at a fixed rate per annum equal to 1.750% above the London Inter-Bank Offered Rate (LIBOR) (0.25% at April 30, 2010). The Term Loan is for a seven-year term ending on July 1, 2012. The loan terms require us to make monthly payments of principal and interest.

As security for our indebtedness under the Term Loan, we have granted to Wells Fargo a security interest in our accounts receivable, general intangibles, inventory, and equipment.

Under the Line of Credit and the Term Loan, we are required to maintain certain financial covenants setting forth minimum ratios for quick ratio and fixed charge coverage and maximum ratios for total liabilities to tangible net worth. As of April 30, 2010, we were in compliance with these covenants.

We are exposed to market risk from changes in interest rates on the Term Loan, and manage this exposure through the use of an interest rate swap agreement with Wells Fargo. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers the overall borrowing costs should interest rates rise. The interest rate swap is accounted for under the authoritative guidance for derivative instruments, and it is designated as a cash flow hedge. We do not anticipate losses on the agreement due to counterparty credit issues. Under this swap, we pay an interest rate of 4.33%, per annum, over the seven-year term of the loan and receive an average floating rate of LIBOR on the notional amount of the loan. The combined interest amounts on the Term Loan and the swap reflect our total monthly interest obligation, which is fixed at 6.08%.

The effective portion of the cash flow hedge is reported as other comprehensive income and is reclassified into earnings in the same period during which the hedged transaction affects earnings. At April 30, 2010, the effective portion of the cash flow hedge was a deferred loss of approximately $135,000 on a gross basis. The deferred loss net of taxes was approximately $82,000 and was included in other comprehensive income and long-term liabilities on our balance sheet. During the three months and six months ended April 30, 2010, we recognized losses related to the hedge of approximately $6,000 and of $19,000 in other comprehensive income, respectively. During the same periods for fiscal year 2009, we recognized losses related to the hedge of approximately $32,000 and $176,000 in other comprehensive income, respectively. During the three months and six months ended April 30, 2010, we recognized interest expense of approximately $35,000 and $73,000, respectively, reclassified from other comprehensive income. During the same periods for fiscal year 2009, we recognized interest expense of $45,000 and $81,000, respectively, reclassified from other comprehensive income. Over the next twelve months, we expect to reclassify approximately $100,000 of the loss to interest expense as principal on the Term Loan is repaid and the related swap-instrument notional amount is reduced. We assess effectiveness of the hedge instrument regularly. The ineffective portion of the gain or loss, if there is one, would impact earnings as it occurs. There is no ineffective portion of the outstanding swap as of April 30, 2010.

Contractual Obligations

The following table sets forth our contractual obligations as of April 30, 2010 (in thousands).

		Payments due by period			
Fiscal Year	Total	Less than 1 Year	1–3 Years	3–5 Years	More than 5 Years
Operating lease obligations	$28,867	$7,618	$10,997	$7,589	$2,663
Purchase obligations	3,835	3,835	—	—	—
Loan obligations – principal	3,214	1,429	1,785	—	—
Loan obligations – interest	232	158	74	—	—
Pyxis Earn-Out	3,750	3,750			
Seismic Earn-Out	2,047	2,047	—	—	—
Total	$41,945	$18,837	$12,856	$7,589	$2,663

Our operating lease obligations consist of non-cancelable lease agreements for our facilities, which expire at various dates between fiscal years 2010 and 2016. Certain leases contain escalation clauses and requirements for the payment of property taxes, insurance, and maintenance expenses.

The Seismic Earn-Out represents the fair value of the contingent liability recorded as part of the acquisition of Seismic on April 28, 2010. If achieved, the maximum undiscounted payment of $2.5 million will be paid in cash.

The Pyxis Earn-Out represents the maximum contingent consideration that could be paid to the former shareholders of Pyxis, based upon the achievement of the targets identified in the purchase agreement dated September 1, 2009. The Pyxis Earn-Out will be recognized in the period that the contingency is resolved. Eighty-four percent of the Pyxis Earn-Out, if achieved will be paid in AST stock and the remaining portion will be paid in cash.

We do not have any off-balance sheet arrangements with unconsolidated entities or related parties, and, accordingly, our liquidity and capital resources are not subject to off-balance sheet risks from unconsolidated entities.

Recent Accounting Pronouncements

In October 2009, the FASB issued ASC Update No. 2009-13, updating ASC Topic 605, *Revenue Recognition*. This update provides new standards for revenue recognition for arrangements with multiple deliverables. These new standards affect the determination of when the individual deliverables may be treated as separate units of accounting. Additionally, these new standards modify the method of allocating consideration to the deliverables. The relative fair value method based on selling prices will be required and the residual method of allocating arrangement consideration will no longer be permitted. These new standards are effective for our fiscal year beginning November 1, 2010. Although the majority of our contracts are accounted for under the guidance for construction-type and production-type contracts, we are currently evaluating the potential impact, if any, on our financial position, results of operations, or cash flows as a result of adopting this new standard.

In October 2009, the FASB issued ASC Update No. 2009-14, updating ASC Topic 985, *Software*. This update

provides new standards that amend the scope of previous software revenue guidance by excluding non-software components of tangible products and certain software components of tangible products. These new standards are effective for our fiscal year beginning November 1, 2010.Although the majority of our contracts are accounted for under the guidance for construction-type and production-type contracts, we are currently evaluating the potential impact, if any, on our financial position, results of operations, or cash flows as a result of adopting this new standard.

In January 2010, the FASB issued ASU No. 2010-06, *Improving Disclosures about Fair Value Measurements* (ASU 2010-06). ASU 2010-06 requires new disclosures for (i) transfers of assets and liabilities in and out of Levels 1 and 2 fair value measurements, including a description of the reasons for such transfers and (ii) additional information in the reconciliation for fair value measurements using significant unobservable inputs (Level 3). This guidance also clarifies existing disclosure requirements including (i) the level of disaggregation used when providing fair value measurement disclosures for each class of assets and liabilities and (ii) the requirement to provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements for Level 2 and 3 assets and liabilities. ASU 2010-06 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the disclosures about activity in the roll forward for Level 3 fair value measurements, which is effective for fiscal years beginning after December 15, 2010. The adoption of this guidance has not had a material impact on our financial position and results of operations.

Reconciliation of GAAP to Non-GAAP Financial Measures

To supplement the consolidated financial results prepared under GAAP, we use a non-GAAP conforming, or non-GAAP, measure that is GAAP net income and earnings per share adjusted to exclude certain costs related to completed acquisitions including the transaction costs, the amortization of intangibles, retention bonuses and compensation expense related to a potential earn-out. Non-GAAP net income and earnings per share gives an indication of the baseline performance before acquisition expenses that are considered by management to be outside the core operating results. These measures are not in accordance with, or an alternative for, GAAP and may be materially different from non-GAAP measures used by other companies. Non-GAAP net income is computed by adjusting GAAP net income for acquisition-related expenses. These non-GAAP results should be read only in conjunction with the consolidated financial statements prepared in accordance with GAAP. AST management regularly uses supplemental non-GAAP financial measures to internally understand, manage, evaluate the business, and make operating decisions. These non-GAAP measures are among the primary factors management uses in planning and forecasting future periods. Management believes that these non-GAAP financial measures reflect an additional way of viewing aspects of operations that, when viewed with GAAP results, provide a more complete understanding of factors and trends affecting the business. Management compensates for the limitations in the use of non-GAAP financial measures by relying on comparable GAAP financial measures and providing investors with a reconciliation of the non-GAAP financial measures to the most directly comparable GAAP financial measures. Below is the reconciliation between net income on a GAAP basis and non-GAAP net income for the second quarter and first six months of fiscal year 2010 ended April 30, 2010.

	Three Months Ended		Six Months Ended	
	April 30, 2010	**May 1, 2009**	**April 30, 2010**	**May 1, 2009**
General and Administrative Operating Expenses				
GAAP general and administrative expenses	$7,809	$5,759	$13,648	$10,889
Non-GAAP acquisition expenses:				

Transaction costs	a	(901)	(7)	(911)	(8)
Amortization of intangibles	b	(192)	(18)	(385)	(36)
Compensation expense	c	(145)	—	(296)	—
Total non-GAAP acquisition expenses		(1,238)	(25)	(1,592)	(44)
Non-GAAP general and administrative expenses		$6,571	$5,734	$12,056	$10,845
Operating Expenses					
GAAP operating expenses		$52,705	$47,045	$95,591	$86,781
Non-GAAP acquisition expenses:					
Transaction costs	a	(901)	(7)	(911)	(8)
Amortization of intangibles	b	(192)	(18)	(385)	(36)
Compensation expense	c	(145)	—	(296)	—
Total non-GAAP acquisition expenses		(1,238)	(25)	(1,592)	(44)
Non-GAAP operating expenses		$51,467	$47,020	$93,999	$86,737
Operating Income					
GAAP operating income		$5,458	$6,455	$10,652	$12,103
Non-GAAP acquisition expenses:					
Transaction costs	a	901	7	911	8
Amortization of intangibles	b	192	18	385	36
Compensation expenses	c	145	—	296	—
Total non-GAAP acquisition expenses		1,238	25	1,592	44
Non-GAAP operating income		$6,696	$6,480	$12,244	$12,147

		=======	=======	=======	=======
Net Income					
GAAP net income		$3,296	$4,074	$6,435	$7,589
Non-GAAP acquisition expenses:					
Transaction costs	a	901	7	911	8
Amortization of intangibles	b	192	18	385	36
Compensation expenses	c	145	—	296	—
Income tax effect on non-GAAP adjustments	d	(523)	(9)	(676)	(17)
		---	---	---	---
Total non-GAAP acquisition expenses		715	16	916	27
		---	---	---	---
Non-GAAP net income		$4,011	$4,090	$7,351	$7,616
		=======	=======	=======	=======
Non-GAAP net income per common share:					
Basic		$0.30	$0.31	$0.55	$0.59
Diluted		$0.30	$0.31	$0.55	$0.58
Number of shares used in calculating non-GAAP net income per common share:					
Basic		13,091	12,852	13,079	12,803
Diluted		13,230	13,033	13,222	12,978

a. *Transaction Costs*. Transaction costs are primarily legal, due diligence, and other consulting costs that are incurred directly as a result of the acquisition activities.

b. *Amortization of intangibles.* Amortization of intangibles arises from current and prior acquisitions and are non-cash in nature.

c. *Compensation Expense*. Compensation expense includes the retention bonuses payable to the employees of the acquired Pyxis business.

d. *Income tax effect on non-GAAP adjustments*. This amount adjusts the provision for income taxes to reflect the

effect of the non-GAAP adjustments on non-GAAP net income.

Item 3: Quantitative and Qualitative Disclosures about Market Risk

Interest rate risk. Our interest income is sensitive to changes in the general level of United States interest rates. At April 30, 2010, our short-term and long-term securities consisted of municipal securities. Substantially all of our investments in the municipal securities are with AA/AAA/SP-1 (Standard & Poor's), Aa/Aaa/ MIG-1 (Moody's), and AA/AAA/F-1 (Fitch) rated issuers. Our investment policy prohibits our investment in auction rate securities, mortgage-backed securities, and asset-backed securities. Insured municipal notes or bonds are also prohibited, with the exception of daily and weekly variable rate demand notes that contain a hard put feature.

The average days to maturity of our investment portfolio is 145 days as of April 30, 2010. Due to the short-term nature of these cash investments and the ability to liquidate our investment portfolio, we do not believe that there is a material interest rate risk associated with the current credit environment.

As of April 30, 2010, our total cash and investments balance that was sensitive to interest rate risk was approximately $ 12,875,000. As a measurement of the sensitivity of our portfolio, if yields were to fluctuate by 100 basis points, the total effect to the investment portfolio balance would be approximately $51,000.

The following table summarizes our cash equivalents and short-term securities, at fair value, that are sensitive to interest rate risk (in thousands).

	April 30, 2010	October 31, 2009
Cash equivalents:		
Money market funds	$1,803	$2,028
Available-for-sale securities:		
Short-term municipal	10,010	43,454
Long-term municipal	1,062	2,129
	$12,875	$47,611

Term loan and interest rate swap. In connection with the 2005 acquisition of DTI, we entered into a Term Loan agreement in the original principal amount of $10 million with Wells Fargo Bank, the proceeds of which were used for acquisition financing. The Term Loan bears interest at an annual rate of 1.75% above LIBOR (0.25% at April 30, 2010).

We manage potential market risk from changes in interest rates on the Term Loan through the use of an interest rate swap agreement designated as a cash flow hedge. By locking in a fixed rate for the entire term of the loan, this strategy decreases the variability of earnings and cash flows resulting from interest rate fluctuations and lowers our overall borrowing costs should interest rates rise.

Coincident with the Term Loan transaction, we also entered into an interest rate swap agreement with Wells Fargo whereby we pay interest to Wells Fargo at a fixed rate of 4.33% and Wells Fargo pays interest to us at a floating rate tied to the LIBOR index. The combined interest amounts on the Term Loan and the swap reflect our total monthly interest obligation, which is locked in at 6.08%.

Item 4: Controls and Procedures

Conclusions regarding disclosure controls and procedure. Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report.

Changes in internal control over financial reporting. There have been no changes in our internal control over financial reporting during the quarter ended April 30, 2010, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations of the effectiveness of internal control. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the internal control system are met. Because of the inherent limitations of any internal control system, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Notwithstanding these limitations, our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. Our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are, in fact, effective at the “reasonable assurance” level.

Part II. Other Information

Item 1: 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. 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.

On March 11, and July 19, 2005, purported securities class action complaints were filed in the United States District Court, Northern District of California. The cases were considered as *In re Applied Signal Technology Inc. Securities Litigation*, Master File No. 4:05-cv-1027 (SBA). The amended consolidated complaint is brought on behalf of a putative class of persons who purchased our Company’s securities during a class period of August 24, 2004, through February 22, 2005. The complaints name us, our former Chief Executive Officer, and our Chief Financial Officer as defendants, and allege that false and misleading statements regarding us were issued during the class period. The parties have agreed to a settlement, which will be paid by our insurers. On August 3, 2009, the District Court gave final approval to a settlement of this case. A purported appeal of a ruling denying a motion to intervene has been filed.

On August 12, 2008, a purported shareholder derivative action was filed in the Superior Court, State of California. *Shoemaker v. Devine et al.*, No. 1:08-CV-119810. It is brought on purported behalf of the Company, against current and former members of the Board of Directors, our Chief Financial Officer, and our former Chief Executive Officer, asserting that these individuals breached their fiduciary duties, based on essentially the same allegations as the class action case. On May 13, 2010, the Court gave preliminary approval to a proposed settlement of the case, under which the Company will adopt certain corporate governance measures, and set a hearing date to consider final approval.

On May 18, 2009, we filed a complaint for patent infringement in the United States District Court for the Northern District of California, Case Number 3:09-cv-2180-SBA, against Emerging Market Communications, Paradise Datacom LLC, and ViaSat, Inc. On June 12, 2009, we filed an amended complaint adding EMC Satcom

Technologies, Inc. as a defendant. All of the defendants have been served with the complaint and have answered; each asserts standard patent case defenses. On October 15, 2009, ViaSat, Inc. filed a counterclaim against us for infringement of two patents. On November 9, 2009, we answered those counterclaims, denying infringement and alleging that the ViaSat patents are invalid. On May 14, 2010, ViaSat amended its counterclaims against us to assert a third patent and to add third-party claims for patent infringement against our licensee, Comtech EFData. A claim construction hearing is scheduled for December 2, 2010. No trial date has been set. The Court referred the parties to a settlement conference with a Magistrate Judge in the Northern District of California. During a settlement conference with ViaSat, the parties were unable to come to a resolution. A settlement conference with Emerging Market Communications and EMC Satcom Technologies is scheduled for July 22, 2010. If we are unable to come to a resolution of the patent infringement claims with the defendants, we will continue to vigorously pursue our claims and defenses.

Item 1A: Risk Factors

Our future performance is subject to a variety of risks. In addition to the other information set forth in this report, including the information included in the discussion in Part I, Item 2, above, under “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” you should carefully consider the risk factors discussed in Part I, Item 1A, “Risk Factors” in our Annual Report on Form 10-K for the year ended October 31, 2009, which could materially affect our business, financial condition, or future results. There were no other material changes from the risk factors disclosed in our Annual Report on Form 10-K for the fiscal year ended October 31, 2009, filed on January 12, 2010.

Risk Factors Relating to the Acquisition of Seismic

We may be unable to successfully integrate the Seismic business with our existing businesses, including the business acquired from Pyxis in September 2009. As a result of the acquisition of Seismic, LLC on April 28, 2010, we will, over time, integrate the Seismic operations into our combined operations. The integration will require significant efforts, including the coordination of future development, sales, and marketing efforts. We may find it difficult to integrate these operations. Former customers of Seismic may decline to do business with us. The challenges involved in the integration of the acquisition include, but are not limited to, the following:

- Retaining Seismic customers and strategic partners and enhancing the relationship of the combined company with current and future Seismic customers and strategic partners
- Integrating and retaining the key employees acquired from Seismic, as well as retaining key employees of ours performing similar services to those offered by Seismic prior to the acquisition, including employees joining us from Pyxis.
- Coordinating development activities to enhance the services offered by Seismic, Pyxis, and us, and to expand our software engineering, system and database administration, systems engineering, information assurance, and project management services for the Department of Defense and Intelligence Community
- Expanding the services offered by the combined company following the acquisition relating to cleared system software development, systems architecture, application performance management, web portal development, data management, and data mining, especially in light of rapidly evolving markets for those products and technologies
- Effectively managing the diversion of management’s attention from business matters to integration issues
- Combining development, sales, and marketing activities effectively and quickly
- Combining our business culture with the business culture of our acquired companies
- Enhancing the internal controls of the operations acquired in the acquisition

The merger may fail to achieve the anticipated benefits. We have completed the acquisition with the expectation that the acquisition of Seismic will result in benefits to us, including expansion of our services business, entry into new markets and access to new customers, and expansion of relationships with existing customers, resulting in an increase

in our revenues. Achieving these anticipated synergies and the potential benefits underlying our reasons for completing the acquisition will depend in part on the success of integrating the acquisition into our business. It is not certain that any of the anticipated benefits will be realized. Risks from an unsuccessful integration of the purchase include:

- The potential disruption of our existing business and the distraction of our management
- The risk that we are unable to expand our software engineering, system and database administration, systems engineering, information assurance, and project management services for the Department of Defense and Intelligence Community; enhance and expand our relationships with customers in this industry; and add additional services to the solutions we offer to our customers
- The risk that we are unable to retain key employees of Seismic, or key employees acquired from our acquisition of Pyxis, causing disruption to our ability to continue to offer the services offered by Seismic or Pyxis to its customers, generate revenues, and expand this business
- The risk that the costs and expenditures for retaining personnel, enhancing the internal controls and infrastructure required to integrate the acquired businesses with our operations, and integrating the businesses are greater than anticipated.

Even if we are able to integrate the acquisition with our operations, there can be no assurance that the anticipated benefits will be achieved. The failure to achieve such benefits could adversely affect our business, results of operations, and financial condition.

We must retain and motivate key employees, and failure to do so could seriously harm our financial results and operations. We expect to retain substantially all of the Seismic employees in connection with the acquisition; however, these personnel may decline to join our company, and even if they join, we may be unable to retain key employees following the acquisition. To be successful, we must also retain and motivate existing executives and other key employees. Our employees and former employees of Seismic or Pyxis may experience uncertainty about their future role with us until or after strategies with regard to the acquisition have been executed. This potential uncertainty may adversely affect our ability to attract and retain key personnel. As the acquired businesses are each entirely dependent on the continued retention of employees able to perform the services offered by Seismic and Pyxis, any failure to retain key employees will cause us to fail to achieve the revenues expected from the acquisition, and to achieve the benefits of the acquisition.

We expect to incur significant costs associated with the acquisition. Each of Pyxis and Seismic is a small company, operating without a large infrastructure or robust internal controls. We will need to integrate the acquired operations with our own operations, and ensure the development of appropriate controls and procedures commensurate with the controls and procedures that we operate all of our other operations. We expect that we will incur direct transaction costs associated with the acquisition, including direct costs of the acquisition as well as liabilities to be accrued in connection with the acquisition. In addition, we may incur charges to operations, which are not currently reasonably estimable, in the quarter in which the acquisition is completed or the following quarters, to reflect costs associated with integrating the acquisition. There is no assurance that we will not incur additional material charges in subsequent quarters to reflect additional costs associated with the acquisition. If the benefits of the acquisition do not exceed the costs of the acquisition, our financial results may be adversely affected.

We expect to incur significant amounts of goodwill associated with the acquisitions. We will account for the acquisition of each of Pyxis and Seismic by using the purchase method of accounting. A portion of the purchase price for each business will be allocated to identifiable tangible and intangible assets and assumed liabilities based on estimated fair values at the date of consummation of the acquisition. Any excess purchase price, which is likely to constitute a significant portion of the purchase price, will be allocated to goodwill. In accordance with the accounting guidance, goodwill and certain other intangible assets with indefinite useful lives are not amortized but are reviewed at least annually for impairment, or more frequently if there are indications of impairment. All other intangible assets are subject to periodic amortization. We evaluate the remaining useful lives of other intangibles each quarter to

determine whether events and circumstances warrant a revision to the remaining period of amortization. When the combined company performs future impairment tests, it is possible that the carrying value of goodwill or other intangible assets could exceed their implied fair value and therefore would require adjustment. Such adjustment would result in a charge to operating income in that period. Once adjusted, there can be no assurance that there will not be further adjustments for impairment in future periods.

The acquisition of Pyxis and Seismic results in a new line of business for us that could be difficult to integrate, disrupt our business, dilute stockholder value, or harm our results of operations. Although we offer some services to customers similar to those offered by Pyxis, our preliminary acquisition of Pyxis, followed by our acquisition of Seismic, substantially enhances our presence in this line of business. We may acquire or make additional investments in complementary businesses, technologies, services, or products and enter into new lines of business if appropriate opportunities arise. The process of integrating any acquired business, technology, service, or product into our business and operations or entry into a new line of business in which we are inexperienced may result in unforeseen operating difficulties and expenditures. Integration of an acquired company also may consume much of our management's time and attention that would otherwise be available for ongoing development of our business. In developing and marketing the new line of business acquired, we will invest significant time and resources. External factors, such as competitive alternatives and shifting customer preferences, may also impact the successful implementation of this new line of business. Therefore, we may be unable to take full advantage of business opportunities for the software engineering, system and database administration, systems engineering, information assurance, and project management services for the Department of Defense and Intelligence Community, and we may encounter difficulties in meeting our expectations or the expectations of investors for the operating results of this business. Failure to successfully manage these risks in the development and implementation of new lines of business could have a material, adverse effect on the Company's business, financial condition, and results of operations.

Item 2: Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3: Defaults Upon Senior Securities

None.

Item 4:

Reserved.

Item 5: Other Information

None.

Item 6: Exhibits

Exhibits. See Index to Exhibits.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

June 7, 2010

Applied Signal Technology, Inc. /s/ James E. Doyle
James E. Doyle Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)

Applied Signal Technology, Inc.
Index to Exhibits

Exhibit Number	Description of Document
2.4[(2)]	Membership Interest Purchase Agreement dated April 28, 2010, by and among Applied Signal Technology, Inc., Seismic LLC, and Patrick J. Gahan and Scott D. McDonald, as sellers
3.1	Second Amended and Restated Articles of Incorporation
3.2	Amended and Restated Bylaws
3.3[(1)]	Amendment to the Second Amended and Restated Articles of Incorporation of Applied Signal Technology, Inc.
4.1	Specimen Common Stock Certificate
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

[(1)]Incorporated by reference to corresponding Exhibit filed as an Exhibit to our Current Report on Form 8-K filed on March 23, 2010.

[(2)]Incorporated by reference to corresponding Exhibit filed as an Exhibit to our Current Report on Form 8-K filed on May 4, 2010.