ION GEOPHYSICAL CORP
Form 10-K/A
July 09, 2010

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
Form 10-K/A
(Amendment No. 1)

(Mark One)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2009

or

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 1-12691
ION Geophysical Corporation
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**22-2286646**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*

2105 CityWest Blvd
Suite 400
Houston, Texas 77042-2839
(Address of Principal Executive Offices, Including Zip Code)
(281) 933-3339
(Registrant s Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $0.01 par value	New York Stock Exchange
Rights to Purchase Series A Junior Participating Preferred Stock	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act Yes o No þ

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).* Yes o No o

* The registrant has not yet been phased into the interactive data requirements.

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

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 the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer þ	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ

As of June 30, 2009 (the last business day of the registrant s second quarter of fiscal 2009), the aggregate market value of the registrant s common stock held by non-affiliates of the registrant was $279.4 million based on the closing sale price on such date as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date: common stock, $.01 par value, 118,695,952 shares outstanding as of February 22, 2010.

DOCUMENTS INCORPORATED BY REFERENCE

Document	**Parts Into Which Incorporated**
Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held May 26, 2010	Part III

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EXPLANATORY NOTE

This Form 10-K/A is being filed to revise certain sections of Part II, Item 7 and Part II, Item 9A, of ION Geophysical Corporation s Annual Report on Form 10-K for the year ended December 31, 2009, filed with the Securities and Exchange Commission on March 1, 2010. In addition, this Form 10-K/A includes disclosures pursuant to Part III, Item 11 of Form 10-K. These revisions are made in response to recent comments from the staff of the Division of Corporation Finance of the Securities and Exchange Commission.

This amendment revises Part II, Item 7. *Management s Discussion and Analysis of Financial Condition and Results of Operations* as follows:

Amends the section entitled *Key Financial Metrics* by adding gross profit and gross margin data to the table;

Amends the subsections entitled *Results of Operations Year Ended December 31, 2009 Compared to Year Ended December 31, 2008* and *Results of Operations Year Ended December 31, 2008 Compared to Year Ended December 31, 2007,* by providing under *Net Revenues, Gross Profits and Gross Margins* of each subsection, additional disclosures regarding the profitability of our business segments;

Amends the first paragraph under *Liquidity and Capital Resources Sources of Capital* to provide additional disclosures regarding our working capital requirements; and

Amends the subsection entitled *Meeting our Liquidity Requirements Cash Flow from Operations* to provide additional disclosures regarding our cash flows from operations and causes of changes in certain working capital line items in 2009 and 2008.

This amendment also revises Part II, Item 9A. *Controls and Procedures* by deleting the last two sentences from the first paragraph under sub-section (a), *Evaluation of Disclosure Controls and Procedures*.

In addition, this amendment revises certain information contained in ION Geophysical s Definitive Proxy Statement for its Annual Meeting of Stockholders held on May 26, 2010, which was filed with the SEC on Schedule 14A on April 21, 2010. These revisions appear in Part III, Item 11. *Executive Compensation* of this Form 10-K/A:

Amends the subsection entitled *Compensation Discussion and Analysis Objectives of Our Executive Compensation Programs General Compensation Philosophy and Policy* by providing additional information regarding our company s determination not to proceed with our stock option replenishment program during 2009;

Amends the subsection entitled *Compensation Discussion and Analysis Annual Incentive Compensation 2009 Incentive Plan* by providing additional information regarding the Compensation Committee s evaluation of executive performance and personal criteria success factors; and

Amends the subsection entitled *Summary Compensation Table Potential Payments Upon Termination or Change of Control* by providing information regarding the definition of change of control under certain employment agreements and equity compensation plans and information regarding certain potential payments upon termination or a change of control for James R. Hollis, a former executive officer.

As required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended (the Exchange Act), new certifications by our company s principal executive officer and principal financial officer are being filed as exhibits to this Form 10-K/ A under Item 15 of Part IV.

For purposes of this Form 10-K/A, and in accordance with Rule 12b-15 under the Exchange Act, each item of our Annual Report on Form 10-K for the year ended December 31, 2009, as originally filed on March 1, 2010, that was affected by this Form 10-K/A, has been amended and restated in its entirety. No attempt has been made in this Form 10-K/A to modify or update other disclosures as presented in the original Form 10-K, except as required to reflect such amendments.

This Form 10-K/A contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements should be read in conjunction with the cautionary

statements and other

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important factors included in the Form 10-K. See Item 1A. Risk Factors of the Form 10-K for a description of important factors which could cause actual results to differ materially from those contained in the forward-looking statements.

In this Form 10-K/A, ION Geophysical, ION, company, we, our, ours and us refer to ION Geophysical Corporation and its consolidated subsidiaries, except where the context otherwise requires or as otherwise indicated. Certain trademarks, service marks and registered marks of ION referred to in this Form 10-K /A are defined in Item 1. *Business Intellectual Property* in the Form 10-K.

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PART II

Item 7. ***Management s Discussion and Analysis of Financial Condition and Results of Operations***

Note: The following should be read in conjunction with our Consolidated Financial Statements and related notes that appear elsewhere in the Annual Report on Form 10-K filed with the SEC on March 1, 2010.

Executive Summary

Our Business. We are a technology-focused seismic solutions company that provides advanced seismic data acquisition equipment, seismic software and seismic planning, processing and interpretation services to the global energy industry. Our products, technologies and services are used by oil and gas exploration and production (E&P) companies and seismic contractors to generate high-resolution images of the Earth s subsurface for exploration, exploitation and production operations.

We operate our company through four business segments. Three of our business segments Land Imaging Systems, Marine Imaging Systems and Data Management Solutions make up our ION Systems division. Our fourth business segment is our ION Solutions division.

Land Imaging Systems cable-based, cableless and radio-controlled seismic data acquisition systems, digital geophone sensors, vibroseis vehicles (i.e., vibrator trucks) and source controllers for detonator and vibrator energy sources and also consisting of analog geophone sensors. After we complete our land equipment joint venture with BGP, all of these business lines, with the exception of analog geophone sensors, will become part of the joint venture. See *Proposed Land Joint Venture with BGP*.

Marine Imaging Systems towed streamer and redeployable ocean bottom cable seismic data acquisition systems and shipboard recorders, streamer positioning and control systems and energy sources (such as air guns and air gun controllers).

Data Management Solutions software systems and related services for navigation and data management involving towed marine streamer and seabed operations.

ION Solutions advanced seismic data processing services for marine and land environments, seismic data libraries, and Integrated Seismic Solutions (ISS) services.

Our current business strategy is predicated on successfully executing seven key imperatives:

Increasing our market share and profitability in land acquisition systems and furthering the commercialization of FireFly, our cableless full-wave land data acquisition system, and our other land equipment technologies through our participation in the proposed land equipment joint venture with BGP;

Continuing to manage our cost structure to reflect current market and economic conditions while keeping key strategic technology programs progressing with an overall goal of enabling E&P companies to solve their complex reservoir problems most efficiently and effectively;

Expanding our ION Solutions business in new regions with new customers and new land and marine service offerings, including proprietary services for owners and operators of oil and gas properties;

Globalizing our ION Solutions data processing business by opening advanced imaging centers in new strategic locations, and expanding our presence in the land seismic processing segment, with emphasis on serving the national oil companies;

Developing and introducing our next generation of marine towed streamer products, with a goal of developing markets beyond the new vessel market;

Expanding our seabed imaging solutions business using our VectorSeis Ocean (VSO) acquisition system platform and derivative products to obtain technical and market leadership in what we continue to believe is a very important and expanding market; and

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Leveraging our proposed land equipment joint venture with BGP to design and deliver lower cost, more reliable land imaging systems to our worldwide customer base of land acquisition contractors, while concurrently tapping into a broader set of global geophysical opportunities associated with the exploration, asset development, and production operations of BGP s parent, CNPC.

Our Current Debt Levels. In connection with our acquisition in September 2008 of ARAM, we increased our total indebtedness significantly. As of December 31, 2009, we had outstanding total indebtedness of approximately $277.4 million, net of a $8.7 million non-cash debt discount associated with $40.0 million in Convertible Notes, and including capital lease obligations. Total indebtedness on that date included $101.6 million of outstanding five-year term indebtedness and $118.0 million, excluding the non-cash debt discount, in outstanding revolving credit debt, in each case incurred under our amended commercial banking credit facility (the Amended Credit Facility). Total indebtedness on that date also included $19.1 million in borrowings under our secured equipment financing transaction with ICON (described below) and $35.0 million of subordinated indebtedness outstanding under an amended and restated subordinated promissory note (the Amended and Restated Subordinated Note) that we had issued to one of ARAM s selling shareholders as part of the purchase price consideration for the ARAM acquisition.

On June 4, 2009, we completed a private placement transaction under which we issued and sold 18,500,000 shares of our common stock in privately-negotiated transactions, for aggregate gross proceeds of approximately $40.7 million. The $38.2 million of net proceeds from the offering, along with $2.6 million of cash on hand, were applied to repay in full the outstanding indebtedness under a 2008 bridge loan agreement with Jefferies Finance LLC. The indebtedness under the bridge loan agreement had been scheduled to mature on January 31, 2010 and had an effective interest rate at the time of repayment of 25.3%. We also entered into an additional amendment to the Amended Credit Facility (the Fifth Amendment), which among other things, modified certain of the financial and other covenants contained in the Amended Credit Facility. See further discussion below at *Liquidity and Capital Resources Sources of Capital* and at Note 12 *Notes Payable, Long-term Debt and Lease Obligations*.

On June 29, 2009, we entered into a $20.0 million secured equipment financing with ICON ION, LLC, an affiliate of ICON Capital Inc. (ICON), receiving $12.5 million in funding on that date and $7.5 million in July 2009. All borrowed indebtedness under the master loan agreements governing this equipment financing arrangement is scheduled to mature on July 31, 2014. We used the proceeds of the secured term loans for working capital and general corporate purposes. See further discussion below at *Liquidity and Capital Resources Sources of Capital* and at Note 12 *Notes Payable, Long-term Debt and Lease Obligations.*

Proposed Joint Venture with BGP. On October 23, 2009, we entered into a binding term sheet (the Term Sheet) with BGP Inc., China National Petroleum Corporation, a company organized under the laws of the people s Republic of China (BGP), which sets forth, among other things, the principal terms for a proposed land equipment joint venture between BGP and us. In connection with the execution of the Term Sheet, we entered into an amendment to the Amended Credit Facility (the Sixth Amendment) that, among other things, (i) increased the aggregate revolving commitment amount under the Amended Credit Facility from $100.0 million to $140.0 million, (ii) permitted Bank of China, New York Branch (Bank of China), to join the Amended Credit Facility as a lender, and (iii) modified, or provided limited waivers of, certain of the financial and other covenants contained in the Amended Credit Facility.

Our bridge financing arrangement consisted of the following:

Two promissory notes (the Convertible Notes) issued to the Bank of China under the Amended Credit Facility for an aggregate principal amount of $40.0 million, both convertible into shares of our common stock; and

A Warrant Issuance Agreement with BGP, under which we granted to BGP a warrant (the Warrant) to purchase shares of our common stock that may be exercised in lieu of conversion of the Convertible Notes.

See further discussion below at *Proposed Joint Venture and Related Transactions with BGP.*

Waivers under Amended Credit Facility. As a result of our October 2009 bridge financing arrangements with Bank of China, we believe that our liquidity will be sufficient to fund our operations until such time as the transactions with BGP are completed or alternative financing could be obtained. Additionally, as a result of our entering into the Sixth Amendment, we believe that the waivers of the financial covenants contained in the Amended Credit Facility for the fiscal quarters ending September 30, 2009, December 31, 2009, March 31, 2010 and June 30, 2010 should enable us to conduct our operations without defaulting under our Amended Credit Facility until the transactions under the Term Sheet are completed. We currently expect these transactions will be completed in March 2010. Without these waivers, we would not have been in compliance with certain of our financial covenants at September 30, 2009 or December 31, 2009.

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If the proposed transactions under the Term Sheet are not completed by March 31, 2010, then the current waivers, upon notice from the lenders after a designated period of time, would cease to be effective and we at that time would likely not be in compliance with certain of the financial covenants contained in the Amended Credit Facility, which could then result in an event of default. As the current waivers cover a period of less than twelve months from December 31, 2009, we have classified our long-term indebtedness under our revolving line of credit and term loan facility under the Amended Credit Facility as current at December 31, 2009. As a result of the cross-default provisions in our secured equipment financing and our amended and restated subordinated seller note, we have also classified these long-term obligations as current at December 31, 2009.

Even though we believe the joint venture with BGP will be completed as planned, there are certain events outside of the our control (such as us experiencing a material adverse event or condition that results in a material adverse effect on our business, our prospects or results of operations) that could cause the closing of the joint venture to be delayed, terminated or abandoned. In such event, we would need to seek to amend, or seek additional covenant waivers under, the Amended Credit Facility. Even though the lenders under the Amended Credit Facility have demonstrated their willingness to work with us in amending or providing sufficient waivers to its facility, there can be no assurance that we would be able to obtain any such waivers or amendments in the future. If we were to be unable to obtain such waivers or amendments from the lenders, we would likely seek to replace or pay off the Amended Credit Facility with new secured debt, unsecured debt or equity financing.

As part of the formation of the joint venture, we have been in discussions with various financial institutions (both domestic and international) on the refinancing of our debt. As a result of these discussions and with the recent improvements within the financial markets, we believe that in the unlikely event the joint venture is not completed as planned, we would be able to obtain additional debt or equity financings prior to defaulting on our current debt obligations. However, there also can be no assurance that such debt or equity financing would be available on terms acceptable to us or at all.

Economic Conditions and Cost Containments. Demand for our products and services is cyclical and substantially dependent upon activity levels in the oil and gas industry, particularly our customers willingness and ability to expend their capital for oil and natural gas exploration and development projects. This demand is highly sensitive to current and expected future oil and natural gas prices. The volatility of oil and natural gas prices in recent years has resulted in sharply curtailed demand for oil and gas exploration activities in North America and other regions. The uncertainty surrounding future economic activity levels and the tightening of credit availability resulted in decreased sales levels for several of our businesses in 2009. Our land seismic equipment businesses in North America and Russia have been particularly adversely affected.

Our seismic contractor customers and the E&P companies that are users of our products, services and technology have generally reduced their capital spending levels since 2008. We also expect that exploration and production expenditures will remain at restrained levels to the extent E&P companies and seismic contractors are limited in their access to the credit markets as a result of further disruptions in, or continued conservative lending practices in, the credit markets. There continues to be significant uncertainty about future activity levels and the impact on our businesses. In particular, our North America and Russia land systems business and our vibroseis truck business experienced steep sales declines in 2009, and uncertain prospects for 2010.

In response to the global economic downturn, we took measures to reduce operating costs in our businesses during 2008 and 2009. In addition, we slowed our capital spending, including our investments in our multi-client data libraries in 2009. For the year ended December 31, 2009, total capital expenditures were $92.6 million, compared to $127.9 million for the year ended December 31, 2008. We are projecting capital expenditures for 2010 to be between $100 million to $110 million. Of that total, we expect to spend approximately $90 million to $100 million on investments in our multi-client data library, and we anticipate that a majority of this investment will be underwritten by our customers. To the extent that our customers commitments do not reach an acceptable level of pre-funding, the amount of our anticipated investment could in likely respect decline. The remaining sums are expected to be funded from internally generated cash.

We are continuing to explore ways to reduce our cost structure. We have taken a deliberate approach to analyzing product and service demands in our business and are taking a more conservative approach in offering extended financing terms to our customers. Our most significant cost reduction to date has related to reduced headcount. Beginning in the fourth quarter of 2008 and continuing through 2009, we reduced our headcount by 384 positions, or approximately 26% of our employee headcount, in order to adjust to the lower levels of activity. Including all contractors and employees, we reduced our headcount by 489 positions, or 27%. In April 2009, we also initiated a salary reduction program that reduced employee salaries. The salary reductions reduced affected employees annual base salaries by 12% for our chief executive officer, chief operating officer and chief financial officer, 10% for all other executives and senior management, and 5% for most other employees. Our Board also elected to implement a 15% reduction in director fees. In addition to the salary reduction program, we suspended our matching contributions to employee 401(k) plan contributions.

We reinstated all employees salaries and director fees at their previous levels following the October 23, 2009 announcement of our company and BGP entering into a binding Term Sheet providing for, among other things, the formation of a joint venture between our company and BGP involving our land-based seismic data acquisition equipment business (see *Proposed Joint Venture and Related Transactions with BGP* below).

We will continue to fund strategic programs to position us for the expected recovery in economic activity. Overall, we will give priority to generating cash flows and reducing our cost structure, while maintaining our long-term commitment to continued technology development. Our business is mainly technology-based. We are not in the field crew business, and therefore do not have large amounts of capital and other resources invested in vessels or other assets necessary to support contracted seismic data acquisition services, nor do we have large manufacturing facilities. This cost structure gives us the flexibility to adjust our expense base when downward economic cycles affect our industry.

While the current global recession and the decline in oil and gas prices have slowed demand for our products and services in the near term, we believe that our industry s long-term prospects remain favorable because of the declining rates in oil and gas production and the relatively small number of new discoveries of oil and gas reserves. We believe that technology that adds a competitive advantage through cost reductions or improvements in productivity will continue to be valued in our marketplace, even in the current difficult market. For example, we believe that our new technologies, such as FireFly, DigiFIN and Orca, will continue to attract interest from our customers because those technologies are designed to deliver improvements in image quality within more productive delivery systems. We have adjusted much of our sales efforts for our ARIES land seismic systems from North America to international sales channels (other than Russia).

International oil companies (IOCs) continue to have difficulty accessing new sources of supply for their exploration activities, partially as a result of the growth of national oil companies. This situation is also affected by increasing environmental concerns, particularly in North America, where companies may be denied access to some of the most promising onshore and offshore exploration opportunities. It is estimated that approximately 85%-90% of the world s reserves are controlled by national oil companies, which increasingly prefer to develop resources on their own or by working directly with the oil field services and equipment providers. These dynamics often prevent capital, technology and project management capabilities from being optimally deployed on the best exploration and production opportunities, which results in global supply capacity being less than it otherwise might be. As a consequence, the pace of new supply additions may be insufficient to keep up with demand once the global recession ends.

2009 Developments. Our overall total net revenues of $419.8 million for the year ended December 31, 2009 decreased $259.7 million, or 38.2%, compared to total net revenues for the year ended December 31, 2008. At the same time, our overall gross profit percentage improved for the year ended 2009 to 31.5% compared to 30.6% for the year ended 2008. For the year ended December 31, 2009, we recorded a loss from operations of ($58.2) million (which includes the effect of an impairment of intangible assets charge of $38.0 million taken in the first quarter of 2009), compared to ($212.8) million (which includes the effect of impairments of goodwill and intangible asset charges of $252.3 million taken in the fourth quarter of 2008) for the year ended December 31, 2008.

Developments during 2009 and early 2010 include the following:

- In January 2009, we announced our first delivery of a multi-thousand station version 2.0 FireFly system equipped with digital, full-wave VectorSeis sensors to the world s largest land contractor. The deployment in the second quarter of 2009 (we recognized the revenue from this sale in the fourth quarter of 2009) of this FireFly system occurred in a producing hydrocarbon basin containing reservoirs that have proven difficult to image with conventional seismic techniques.

- In March 2009, we announced that we had signed an agreement with The Polarcus Group of Companies for the provision of seismic data processing services. Under the agreement, we will provide hardware, software and geophysicists in order to support a seismic project s entire imaging lifecycle, from the vessel to an onshore data processing center.

In April 2009, we announced that a 6,100 station FireFly system will be utilized by a major oil company to undertake two high channel count, multicomponent (full-wave) seismic acquisition programs in northeast Texas, and, in July 2009, we announced that our client had sanctioned the second phase of the program.

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In April 2009, we announced the first commercial sale of our cable-based ARIES II seismic recording platform to one of the world s largest geophysical services providers. The sale includes two 5,000 channel ARIES II recording systems that the customer plans to deploy on upcoming, high-channel count seismic surveys.

In May 2009, we announced that an 8,000 station FireFly system will be utilized by Compania Mexicana de Exploraciones (Comesa), an oilfield services company majority-owned by PEMEX, the national oil company of Mexico, on three projects in Mexico.

In May 2009, we announced that we had successfully acquired an additional 6,200 kilometers of regional seismic data offshore India s western coast as part of our ongoing IndiaSPAN program. Another 3,800 kilometers has since been acquired off the east coast of India.

In July 2009, we announced that we had successfully completed the data processing and interpretation for ArgentineSPAN , a basin-scale seismic program offshore Argentina. ArgentineSPAN contains approximately 11,800 kilometers of new, regional data.

In July 2009, we announced that we had successfully acquired 5,000 kilometers of regional seismic data covering the Bight Basin and Ceduna Sub-basin offshore southern Australia. Known as BightSPAN , this latest addition to our global BasinSPAN seismic data library offers the first regional geologic study of Australia s deepwater southern coast.

In October 2009, we announced our proposed joint venture with BGP and the related bridge financing transactions. See *Proposed Joint Venture and Related Transactions with BGP.*

In January 2010, we announced that we had extended our BrasilSPAN program, which makes it one of the largest 2-D seismic datasets in our multi-client data library. The program currently contains 42,000 km of data off the coast of South America.

Proposed Joint Venture and Related Transactions with BGP

On October 23, 2009, we entered into a binding Term Sheet with BGP, which provides for, among other things, the formation of a joint venture between our company and BGP involving our land-based seismic data acquisition equipment business.

The Term Sheet contemplates that we will enter into a purchase agreement with BGP to form the joint venture. We expect to form the joint venture entity as a wholly-owned subsidiary of ION Geophysical Corporation and will contribute to the joint venture certain assets and related liabilities that relate to the proposed joint venture business. Then, BGP will acquire from us a 51% equity interest in the joint venture for an aggregate purchase price of $108.5 million cash and will contribute to the joint venture certain of its assets and related liabilities that relate to the joint venture s business. The assets of each party to be contributed to the joint venture will include seismic recording systems, inventory, certain intellectual property rights and contract rights, all as may be necessary to or principally used in the conduct or operation of the businesses to be contributed to the joint venture as presently conducted or operated by each party.

The scope of the joint venture s business is defined in the Term Sheet as being the business of designing, development, engineering, manufacturing, research and development, distribution, sales and marketing and field support of land-based equipment used in seismic data acquisition for the petroleum industry. Excluded from the scope of the joint venture s business will be (x) the analog sensor businesses of our company and BGP and (y) the businesses of certain companies in which BGP or we are currently a minority owner. In addition to these excluded businesses, all of our other businesses including our Marine Imaging Systems, Data Management Solutions and ION Solutions, which includes GXT s Imaging Solutions, Integrated Seismic Solutions (ISS) and BasinSPAN and seismic data libraries will remain owned and operated by us and will not comprise a part of the joint venture.

Under the Term Sheet, the parties have agreed to use their best efforts to cause the closing of the joint venture and related transactions to occur as soon as practicable following the execution of the definitive transaction documents, and on or before the later to occur of the following dates: (i) December 31, 2009 or (ii) 10 business days following the date on which all necessary regulatory approvals (including receiving clearance from the Committee on Foreign Investment in the United States (CFIUS) to complete the transactions) have been obtained, but in any event, no later than March 31, 2010. The parties obligations under the Term Sheet may be terminated (a) by written agreement of the parties, (b) by either party in the even that such party s conditions have not been satisfied on or before March 31, 2010 (subject to a 15-day cure period) or (c) by either party in the event that certain mutual conditions have not been satisfied on or before March 31, 2010. In addition, BGP and we have each agreed to pay the other a break-up fee of $5.0

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million if either party determines to terminate its obligations under the Term Sheet because the other party has failed to satisfy certain conditions, including conditions precedent to closing that (x) the other party has not experienced a material adverse event or condition that has resulted in a material adverse effect on its business, prospects and results of operations change, (y) the other party has not breached any of its representations and warranties contained in the Term sheet and such representations and warranties continue to be true and correct and (z) with respect to BGP s obligations under the Term Sheet, we have not suffered any material default or accelerations of any of our liabilities.

On October 27, 2009, we borrowed an aggregate of $40.0 million in the form of revolving credit bridge loan financing from Bank of China, which was evidenced by the Convertible Notes. This borrowing was pursuant to and permitted by the terms of the Sixth Amendment to the Credit Facility, which increased the aggregate revolving commitment amount under the accordion feature provisions of the Amended Credit Facility from $100.0 million to $140.0 million and permitted the Bank of China to join the Amended Credit Facility as a lender.

The Convertible Notes provide that at the stated initial conversion price of $2.80 per share, the full $40.0 million principal amount under the Convertible Notes would be convertible into 14,285,714 shares of Common Stock. The Convertible Notes provide that the conversion price and the number of shares into which the notes may be converted are subject to adjustment under certain terms and conditions similar to those contained in the Warrant.

As part of BGP arranging for the Bank of China to join our Amended Credit Facility, we granted to BGP the Warrant. The Warrant will be exercisable, in whole or in part, at any time and from time to time, subject to the conditions described below. The Warrant will initially entitle the holder thereof to purchase a number of shares of common stock equal to $40.0 million divided by the exercise price of $2.80 per share, subject to adjustment as described below. At the initial exercise price of $2.80 per share, at such time as the Warrant becomes exercisable, it would initially be fully exercisable for 14,285,714 shares of common stock.

The Warrant will only become exercisable and the Convertible Notes will only become convertible upon receipt of certain governmental approvals. Any conversions of the Convertible Notes and prior exercises of the Warrant will reduce the dollar amount under the Warrant into which the exercise price may be divided to determine the number of shares that may be acquired upon exercise.

Additionally, the Term Sheet provides that when the joint venture transactions are closed:

- BGP will have purchased approximately 23.8 million shares of our common stock for $66.6 million and thereby own, before giving effect to the issuance of those shares, approximately 19.99% of our outstanding common stock.

- To the extent that shares are not purchased by BGP under the Warrant prior to closing, the new revolving credit loans from Bank of China, evidenced by the Convertible Notes will convert into approximately 14.3 million shares of ION common stock and will be credited against the approximately 23.8 million shares of ION stock to be purchased by BGP at the transaction closing.

- ION will appoint a designee of BGP to its Board of Directors to serve with the current nine members of ION s Board of Directors.

- BGP will arrange for our then-outstanding long-term debt under the Amended Credit Facility (currently $101.6 million outstanding at February 22, 2010) to be refinanced at the joint venture closing.

- We will use a portion of the proceeds from the transactions to pay off and retire our outstanding indebtedness under our current revolving credit facility (after giving effect to the $40.0 million in additional revolving credit borrowings under our existing Amended Credit Facility, approximately $118.0 million is currently outstanding at February 22, 2010) and $35.0 million in seller subordinated indebtedness incurred in connection with our acquisition of ARAM in September 2008.

- We will receive a new $100 million revolving credit facility at the joint venture closing.

- The $19.1 million (as of December 31, 2009) secured equipment financing transaction with ICON will be assigned to and become indebtedness of the joint venture.

The proposed joint venture is intended to provide a number of benefits and opportunities, including the following:

Preferred access to BGP, currently the world s largest land seismic contractor;

Anticipated improved economies of scope and scale in our land data acquisition system manufacturing and sales operations, enabling us to deliver products in a more timely manner at an overall lower cost to its customers;

Combining our strengths in land equipment technologies with BGP s emerging geophysical product portfolio and expertise in operating land seismic acquisition crews, which should permit new joint venture products to be designed and field-tested for reliability, quality and productivity to the benefit of all customers; and

Aligning the joint venture engineering teams to develop innovative, market-leading land recording systems, 3C (full-wave) sensor and vibroseis products.

We believe that the joint venture will enable us to continue developing land systems and sensor technologies with lessened primary capital requirements through our partnership with BGP.

Key Financial Metrics

The following table provides an overview of key financial metrics for our company as a whole and our four business segments during the twelve months ended December 31, 2009, compared to those for fiscal 2008 and 2007 (in thousands, except per share amounts):

	Years Ended December 31,		
	2009	**2008**	**2007**
Net revenues:			
ION Systems Division:			
Land Imaging Systems	$ 103,038	$ 200,493	$ 325,037
Marine Imaging Systems	103,024	182,710	177,685
Data Management Solutions	33,733	37,240	37,660
Total ION Systems Division	239,795	420,443	540,382
ION Solutions Division	179,986	259,080	172,729
Total	$ 419,781	$ 679,523	$ 713,111
Gross profits:			
ION Systems Division:			
Land Imaging Systems	$ 1,931	$ 30,279	$ 59,786
Marine Imaging Systems	48,365	74,567	69,904
Data Management Solutions	21,998	24,656	22,292
Total ION Systems Division	72,294	129,502	151,982
ION Solutions Division	59,844	78,246	54,601
Total	$ 132,138	$ 207,748	$ 206,583
Gross margins:			
ION Systems Division:			
Land Imaging Systems	1.9%	15.1%	18.4%
Marine Imaging Systems	46.9%	40.8%	39.3%

Data Management Solutions	65.2%	66.2%	59.2%
Total ION Systems Division	30.1%	30.8%	28.1%
ION Solutions Division	33.2%	30.2%	31.6%
Total	31.5%	30.6%	29.0%
Income (loss) from operations:			
ION Systems Division:			
Land Imaging Systems	$ (39,126)	$ (13,662)	$ 28,681
Marine Imaging Systems	29,632	52,624	44,727
Data Management Solutions	19,970	22,298	17,290
Total ION Systems Division	10,476	61,260	90,698
ION Solutions Division	27,747	40,534	21,646
Corporate	(58,395)	(62,334)	(48,450)
Impairment of goodwill and intangible assets	(38,044)	(252,283)	
Total	$ (58,216)	$ (212,823)	$ 63,894
Net income (loss) applicable to common shares	$ (113,559)	$ (293,713)	$ 40,256
Basic net income (loss) per common share	$ (1.03)	$ (3.06)	$ 0.49
Diluted net income per (loss) common share	$ (1.03)	$ (3.06)	$ 0.45

We intend that the discussion of our financial condition and results of operations that follows will provide information that will assist in understanding our consolidated financial statements, the changes in certain key items in those financial statements from year to year, and the primary factors that accounted for those changes.

We anticipate that we will account for our 49% interest in the proposed joint venture with BGP under the equity method of accounting under U.S. generally accepted accounting principles. As a result, after the joint venture is formed, we will no longer include in our results of operations all of the net revenues and costs and expenses attributable to the contributed businesses on a going forward basis. In our results of operations, our proportional share of the joint venture s net income (loss) will be reported as a single line item, and our investment in the joint venture will be increased by our proportional share of joint venture net income and decreased by our proportional payment of dividends made. Additionally, our equity investment in the joint venture will be reported as a single line item on our balance sheet, and the assets and liabilities of the contributed business currently consolidated in our balance sheet as of December 31, 2009 will be removed. See *Proposed Joint Venture and Related Transactions with BGP* below.

For a discussion of factors that could impact our future operating results and financial condition, see Item 1A. *Risk Factors* above.

Results of Operations

Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

*Net Revenues, Gross Profits and Gross Margins***.**

Land Imaging Systems. Net revenues in 2009 decreased by $97.5 million, to $103.0 million, compared to $200.5 million for the twelve months ended December 31, 2008. Despite the inclusion of ARAM s full-year operating results, net revenues decreased across all of the land imaging segment s product lines due to the continued market decline, which greatly impacted our business in North America and Russia. Gross profit decreased by $28.3 million to $1.9 million, representing a 1.9% gross margin, compared to $30.3 million, representing a 15.1% gross margin, during the twelve months ended December 31, 2008. The decrease in gross margins in our Land Imaging Systems was due to the full-year impact of ARAM s intangible asset amortization and our land segment s rental pool depreciation, combined with lower sales volumes. Additionally, sales of our land acquisition systems, which normally have higher margins than our other land products (such as vibrator trucks), also decreased in 2009 compared to 2008, and contributed to the decreased gross margins in this segment.

Marine Imaging Systems. Net revenues in 2009 decreased by $79.7 million to $103.0 million, compared to $182.7 million for the year ended December 31, 2008. This decrease was seen across most of our marine imaging product lines, most notably in our marine streamer positioning products and our VectorSeis Ocean (VSO) system product line. The decline in our marine streamer positioning products was due to the delays in the scheduled completion and commissioning of new marine vessels to be introduced into the market, which would otherwise have been outfitted with our marine products and would have contributed to our revenues. The decrease in our VSO revenues was due to deliveries in 2008 of VSO System 4 and System 5, which were not duplicated in 2009. This decrease was partially offset by increased sales of our DigiFIN streamer control systems, compared to 2008 levels. Gross profit decreased by $26.2 million to $48.4 million, representing a 46.9% gross margin, compared to $74.6 million, representing a 40.8% gross margin, during the twelve months ended December 31, 2008. The increase in gross margins in our Marine Imaging Systems segment was mainly due to changes in the product mix, principally attributable to a decrease of $38.7 million in VSO revenues in 2009 compared to 2008. Sales of our VSO systems have generally experienced lower margins compared to our other marine products.

Data Management Solutions. Our Data Management Solutions net revenues decreased by $3.5 million to $33.7 million, compared to $37.2 million in 2008. The decrease was due entirely to the effect of foreign currency exchange rate fluctuations. Expressed in Great Britain Pounds Sterling (the local currency), net revenues actually increased by £1.2 million, which was

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principally due to increased sales of our Orca software product. Gross profit decreased by $2.7 million to $22.0 million, representing a 65.2% gross margin, compared to $24.7 million, representing a 66.2% gross margin, during the twelve months ended December 31, 2008. The slight decrease in gross margins in our Data Management Systems was due to changes in product mix, with slightly more equipment sales, which have lower margins than the software sales, in 2009 compared to 2008.

ION Solutions. Net revenues decreased by $79.1 million, to $180.0 million, compared to $259.1 million in 2008. The results for 2009 reflected decreases in sales from our seismic data library from our completed multi-client seismic surveys, most notably in the Africa and India regions, and decreased revenues from new multi-client seismic surveys. These decreases were due to decreased spending by our customers as a result of reduced demand caused by the economic recession. With the overall market decline, the market focus shifted from the acquisition of new seismic data to utilizing and reprocessing previously acquired seismic data. This shift was evidenced by the decreases in our multi-client seismic data library sales and revenues from new multi-client seismic surveys; however, these decreases were partially offset by increases in data processing revenues. Gross profit decreased by $18.4 million to $59.8 million, representing a 33.2% gross margin, compared to $78.2 million, representing a 30.2% gross margin, during the twelve months ended December 31, 2008. The increase in gross margins for our ION Solutions division was mainly driven by the increased revenues from our data processing services compared to revenues from these services for the prior year. This increase was partially offset by lower gross margins in our multi-client data library sales, which were due to the impact of the straight-line multi-client data library amortization rates, combined with lower revenues from sales from that data library. See *Critical Accounting Policies and Estimates Revenue Recognition and Product Warranty*.

Research, Development and Engineering. Research, development and engineering expense was $44.9 million, or 10.7% of net revenues, for the year ended December 31, 2009, a decrease of $4.6 million compared to $49.5 million, or 7.3% of net revenues, for the corresponding period last year. The decrease was due primarily to decreased salary and payroll expenses related to our reduced headcount, partially offset by increased professional fees relating to current projects.

Marketing and Sales. Marketing and sales expense of $34.9 million, or 8.3% of net revenues, for the year ended December 31, 2009 decreased $13.0 million compared to $47.9 million, or 7.0% of net revenues, for the corresponding period last year. The decrease in our sales and marketing expenditures reflects decreased salary and payroll expenses related to reduced headcount, a decrease in travel expenses as part of our cost reduction measures, and a decrease in conventions, exhibits, advertising and office expenses related to cost reduction measures and the timing of the expenses throughout the year. Based upon the recently completed restructuring programs, we expect to continue to incur lower costs related to our marketing and sales efforts than in prior periods as mentioned in *Executive Summary* above.

General and Administrative. General and administrative expense of $72.5 million for the year ended December 31, 2009 increased $1.6 million compared to $70.9 million in the prior year. General and administrative expenses as a percentage of net revenues for the years ended December 31, 2009 and 2008 were 17.3% and 10.4%, respectively. The increase in general and administrative expense was mainly due to additional stock-based compensation expense related to adjustments between estimated and actual award forfeitures of $4.5 million, of which $3.3 million is an out-of-period adjustment. Additionally, general and administrative expenses also reflect the inclusion of ARAM s expenses in 2009 and severance charges related to reductions in headcount. This increase is partially offset by decreased professional legal fees, travel expenses and general office expenses related to cost reduction measures. Based upon the recently completed restructuring programs, we expect to incur lower costs related to our general and administrative activities than in prior periods as mentioned in *Executive Summary* above.

Impairment of Intangible Assets. At March 31, 2009, we further evaluated our intangible assets for potential impairment. Based upon our evaluation and given the current market conditions, we determined that approximately $38.0 million of proprietary technology and customer relationships (written off entirely) related to ARAM acquired intangibles were impaired. In the fourth quarter of 2008, we recorded an impairment charge of $10.1 million related to ARAM s customer relationships, trade name and non-compete agreements. Our net book value associated with ARAM s acquired intangibles is $34.8 million at December 31, 2009 and has a remaining weighted average life of 6.2

years.

Interest Expense, including Amortization of a Non-Cash Debt Discount. Interest expense of $35.7 million for the year ended December 31, 2009 increased $23.0 million compared to $12.7 million for the corresponding period last year. The increase is due to the higher levels of outstanding indebtedness and the secured equipment financing transaction that occurred during the second and third quarters of 2009 combined with increased revolver borrowings of $118.0 million and higher prevailing average interest rates in 2009 compared to 2008. Also, during the year ended December 31, 2009, we amortized to interest expense $6.7 million of a non-cash debt discount associated with the Convertible Notes. The remaining unamortized non-cash debt discount was $8.7 million at December 31, 2009 and will be recognized over the expected term of the Convertible Notes (March 31, 2010). See further discussion of the Convertible Notes and other bridge financing arrangements related to BGP and the Bank of China at *Proposed Joint Venture and Related Transactions with BGP* and *Liquidity and Capital Resources Sources of Capital.* Because of these increased levels of borrowed indebtedness, our interest expense will continue to be significantly higher in 2010 than we experienced in prior years; however, with the closing of the proposed joint venture with BGP and the subsequent re-financing of the Amended Credit Facility, the Company believes that its interest expense will decrease compared to 2009.

Fair Value Adjustment of the Warrant. We are required to account for separately and adjust to fair value the Warrant. We recorded a non-cash fair value adjustment of $29.4 million, reflecting a total non-cash liability associated with the Warrant of $44.8 million at December 31, 2009. We will continue to adjust the Warrant to fair value until such time as it is exercised or converted into our equity at the closing of the joint venture, which is expected to occur in March 2010. Also, associated with the Warrant, we recorded a $15.4 million non-cash discount on the Convertible Notes, which is being amortized to interest expense (see discussion above) over the expected term of the notes (March 31, 2010).

Impairment of Cost Method Investment. At December 31, 2009, we evaluated our cost method investments for potential impairments. Based upon our evaluation and given the current market conditions related to our investment in Colibrys, Ltd., we determined that the investment was fully impaired and recorded an impairment charge of $4.5 million.

Other Income (Expense). Other expense for the year ended December 31, 2009 was ($4.0) million compared to other income of $4.2 million for 2008. The other expense for 2009 mainly relates to higher foreign currency exchange losses that primarily resulted from our operations in the United Kingdom and Canada.

Income Tax (Benefit) Expense. Income tax benefit for the year ended December 31, 2009 was ($20.0) million compared to $1.1 million of tax expense for the year ended December 31, 2008. The increase in tax benefits during 2009 primarily relates to reduced consolidated income from operations. We continue to maintain a valuation allowance for a significant portion of our U.S. net deferred tax assets. Our effective tax rate for the year ended December 31, 2009 was 15.4% as compared to (0.5%) for the similar period during 2008. The increase in our effective tax rate relates primarily to the 2008 impairment of goodwill, which has no tax benefit.

Preferred Stock Dividends. The preferred stock dividend relates to our Series D-1, Series D-2 and Series D-3 Cumulative Convertible Preferred Stock (collectively referred to as the Series D Preferred Stock) that we issued in February 2005, December 2007 and February 2008, respectively. Quarterly dividends must be paid in cash. Dividends are paid at a rate equal to the greater of (i) 5% per annum or (ii) the three month LIBOR rate on the last day of the immediately preceding calendar quarter plus $2^1/2$% per annum. All dividends paid to date on the Series D Preferred Stock have been paid in cash. The Series D Preferred Stock dividend rate was 5.0% at December 31, 2009.

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

Net Revenues, Gross Profits and Gross Margins.

Land Imaging Systems. Net revenues decreased by $124.5 million, to $200.5 million compared to $325.0 million during the twelve months ended December 31, 2007. Despite the inclusion of ARAM s operating results for the last three and a half months of 2008, the segment was strongly impacted by the market decline, which resulted in reduced sales of both land systems and vibroseis trucks. This decrease was made more pronounced by the inclusion of several large 2007 sales of our land acquisition systems that were not duplicated in 2008, including the sale of 14 land acquisition systems to ONGC, the sale of our initial version of FireFly and significantly increased vibrator truck sales in 2007. Gross profit decreased by $29.5 million to $30.3 million, representing a 15.1% gross margin, compared to $59.8 million, representing a 18.4% gross margin, during the twelve months ended December 31, 2007. The decrease in gross margins in our Land Imaging Systems was principally due to inventory write downs of our mature analog products of approximately $10.1 million directly related to the integration activities of ARAM into our current operating segment and the addition of ARAM s intangible asset amortization combined with lower sales volumes. Additionally, sales of our legacy land acquisition systems, which normally have higher margins, also decreased compared to 2007 and contributed to the decreased gross margins.

Marine Imaging Systems. Net revenues increased by $5.0 million to $182.7 million, compared to $177.7 million during the year ended December 31, 2007, principally due to stronger sales of our marine positioning products, including sales related to the full commercialization of our DigiFIN advanced streamer command and control system, the first two commercial sales of our DigiSTREAMER system and stronger sales of our marine seismic data acquisition products. We delivered to RXT the fifth VSO system in 2008; however, VSO system sales decreased compared to 2007, mainly due to the timing of the sales. Gross profit increased by $4.7 million to $74.6 million, representing a 40.8% gross margin, compared to $69.9 million, representing a 39.3% gross margin, during the twelve months ended December 31, 2007. The increase in gross margins in our Marine Imaging Systems segment is mainly due to product mix with a decrease in our VSO revenues in 2008 compared to 2007. Our VSO product lines normally have lower margins when compared to our other products.

Data Management Solutions. Net revenues decreased slightly by $0.5 million to $37.2 million compared to $37.7 million. This decrease was due entirely to the effect of foreign currency exchange rate fluctuations in 2008. Removing the impact of these exchange rate fluctuations, net revenues increased by £1.4 million, principally due to increased sales of Orca. Gross profit increased by $2.4 million to $24.7 million, representing a 66.2% gross margin, compared to $22.3 million, representing a 59.2% gross margin, during the twelve months ended December 31, 2007. This increase in gross margins was due to changes in product mix, with more sales in 2008 of software products (especially Orca), which traditionally have higher margins than equipment sales, than we experienced in 2007.

ION Solutions. Net revenues increased by $86.4 million, to $259.1 million, compared to $172.7 million in 2008. The results for 2008 reflected increases in our new venture program revenues, mainly off the coasts of Alaska and South America, increases in our multi-client data library sales, most notably in the Africa region, and in our data processing revenues. These increases were due to the continued increased spending throughout a majority of 2008; however, the economic recession impacted our new venture programs and our multi-client data library businesses beginning in late 2008. Gross profit increased by $23.6 million to $78.2 million, representing a gross margin of 30.2%, compared to $54.6 million, representing a gross margin of 31.6%, during the twelve months ended December 31, 2007. The decrease in gross margins in this segment was mainly driven by the change in the sales mix between our new venture program sales and multi-client data library sales, partially offset by the higher levels of data processing revenues.

Research, Development and Engineering. Research, development and engineering expense was $49.5 million, or 7.3% of net revenues, for the year ended December 31, 2008, a decrease of $0.5 million compared to $50.0 million, or 7.0% of net revenues, for the corresponding period last year. We expect to continue to incur research, development and engineering expenses in 2009 at a more conservative rate than in prior years, as we continue to invest in our next generation of seismic acquisition products and services.

Marketing and Sales. Marketing and sales expense of $47.9 million, or 7.0% of net revenues, for the year ended December 31, 2008 increased $4.0 million compared to $43.9 million, or 6.2% of net revenues, for the corresponding period last year. The increase in our sales and marketing expenditures reflects the hiring of additional sales personnel, increased exhibit and convention costs and increased travel associated with our global marketing efforts. This increase was partially offset by a decrease in our corporate branding expenses in 2008, due to the higher expenses in 2007 associated with our name change that year.

General and Administrative. General and administrative expense of $70.8 million for the year ended December 31, 2008 increased $21.7 million compared to $49.1 million in the prior year. General and administrative expenses as a percentage of net revenues for the years ended December 31, 2008 and 2007 were 10.4% and 6.9%, respectively. The increase in expenditures was primarily due to increases in our bad debt reserves of $4.6 million, in our professional fees relating to our financing efforts of $5.7 million, in salaries and related expenses of $8.7 million due to the hiring of additional personnel and an increase in general office expenses related to our acquisition of ARAM. This increase was partially offset by a decrease in bonus expense due to the lower operating performance compared to 2007 s operating performance.

Impairment of Goodwill and Intangible Assets. At December 31, 2008, we evaluated our reporting units for potential impairment. Based upon our evaluation and given the current market conditions, we determined that approximately $252.3 million of goodwill and intangible assets related to our Land Imaging Systems, ARAM Systems and ION Solutions reporting units were impaired. We recorded the expense as of December 31, 2008 and reduced the carrying amount of our goodwill and intangible assets.

Income Tax Expense. Income tax expense for the year ended December 31, 2008 was $1.1 million compared to income tax expense of $12.8 million for the twelve months ended December 31, 2007. The decrease in tax expense during 2008 primarily relates to reduced consolidated income from operations and changes to the valuation allowance on U.S. deferred tax assets. This decrease was partially offset by deferred taxes on the utilization of acquired net operating losses. We continue to maintain a valuation allowance for a significant portion of our U.S. net deferred tax assets. Our effective tax rate for the year ended December 31, 2008 was (0.5%) as compared to 23.1% for the similar period during 2007. The decreased effective tax rate for 2008 relates primarily to the impairment of goodwill, which has no tax benefit, and a reduction in the valuation allowance on U.S. deferred tax assets offset by deferred tax expense related to the utilization of acquired net operating losses of $3.5 million. The 2007 and 2008 effective tax rates were lower than the statutory rate due to the goodwill impairment in 2008 and to the utilization of previously reserved U.S. deferred tax assets in both 2007 and 2008.

Preferred Stock Dividends and Accretion. The preferred stock dividend relates to our Series D Preferred Stock that we issued in February 2005, December 2007 and February 2008. Quarterly dividends must be paid in cash. Dividends are paid at a rate equal to the greater of (i) 5% per annum or (ii) the three month LIBOR rate on the last day of the immediately preceding calendar quarter plus $2^{1}/2$% per annum. All dividends paid to date on the Series D Preferred Stock have been paid in cash. The Series D Preferred Stock dividend rate was 6.55% at December 31, 2008.

Adjustments from Preferred Stock Redemption and Conversion Features. Our results of operations for 2008 reflected additional credits to and charges against our earnings resulting from our outstanding Series D-1 Cumulative Convertible Preferred Stock (the Series D-1 Preferred Stock), Series D-2 Cumulative Convertible Preferred Stock (the Series D-2 Preferred Stock) and Series D-3 Cumulative Convertible Preferred Stock (the Series D-3 Preferred Stock and together with the Series D-1 Preferred Stock and the Series D-2 Preferred Stock, the Series D Preferred Stock).

On November 28, 2008, we delivered a notice (the Reset Notice) to Fletcher International, Ltd. (Fletcher) of our election to reset the conversion prices on our outstanding shares of Series D Preferred Stock. See *Liquidity and Capital Resources Sources of Capital Cumulative Convertible Preferred Stock.* Fletcher is the holder of all of the outstanding shares of our Series D Preferred Stock. By delivering the Reset Notice to Fletcher, we reset the conversion prices on all of our Series D Preferred Stock to $4.4517 per share, in accordance with the terms of our agreement with Fletcher dated as of February 15, 2005 (as amended, the Fletcher Agreement). Under the Fletcher Agreement, if a 20-day volume-weighted average trading price per share of our common stock fell below $4.4517 (the Minimum Price), we would be required to (i) thereafter pay all dividends on shares of Series D Preferred Stock only in cash and (ii) elect to either (a) satisfy future redemption obligations by distributing only cash (or a combination of cash and common stock), or (b) reset the conversion prices of all of outstanding shares of Series D Preferred Stock to the Minimum Price, in which event the Series D Preferred Stock holder would have no further rights to call for the redemption of those shares.

We had originally classified the preferred stock outside of stockholders equity on the balance sheet below total liabilities. However, with the termination of the redemption rights, there are no other provisions that require cash redemption. Therefore, in the fourth quarter of 2008, we reclassified the preferred stock to stockholders equity.

The redemption features of our outstanding Series D-2 Preferred Stock and Series D-3 Preferred Stock had been considered embedded derivatives that were required to be bifurcated and accounted for separately at their fair value during 2008. These features had been bifurcated as a separate line item in the liabilities section of our consolidated balance sheet. For each quarter during 2008, these redemption features had been re-measured at quarter-end at their fair value with any resulting gain or loss recognized below income from operations and reflected in earnings for the period. As a result of the election we made under the Reset Notice, Fletcher is no longer permitted to redeem any shares of our Series D Preferred Stock and the original value of the redemption features of $1.2 million was credited to and reflected in other income in the fourth quarter of 2008.

Preferred Stock Beneficial Conversion Charge. As a result of the Reset Notice and the adjustment in November 2008 of the conversion prices for the Series D Preferred Stock to the Minimum Price of $4.4517 per share under the Fletcher Agreement, we recognized in the fourth quarter of 2008 a contingent beneficial conversion feature of the Series D Preferred Stock as a non-cash charge to earnings in the amount of $68.8 million. Under applicable financial accounting guidance, the adjustment of reducing the conversion price was deemed to be equivalent to value being transferred to the holder of the Series D Preferred Stock, with such holder thereby realizing enhanced economic value compared to the holders of other ION securities that did not hold a beneficial conversion feature. This feature was calculated at its intrinsic value at the original commitment date, and the amount of the charge was limited to the amount of proceeds allocated to the convertible instruments (i.e. the Series D Preferred Stock).

Liquidity and Capital Resources

Sources of Capital

Our cash requirements include our working capital requirements, and cash required for our debt service payments, dividend payments on our preferred stock, seismic data acquisitions and capital expenditures. As of December 31, 2009, we had a working capital deficit of $59.0 million, principally resulting from the reclassification of our long-term indebtedness under our commercial

banking revolving line of credit and term loan facility to short-term indebtedness. Excluding $271.1 million of our short-term notes payable and the current maturities of our long-term debt, our working capital would have been a positive $212.1 million at December 31, 2009. Working capital requirements are mainly driven by our continued investment in our multi-client seismic data library ($89.6 million in fiscal 2009) and our inventory purchase obligations. In comparison to one year ago, we have reduced our outstanding inventory purchase obligations to $21.4 million at December 31, 2009 from $72.6 million at December 31, 2008. Also, our headcount has traditionally been a significant driver of our working capital needs. Because a significant portion of our business is involved in the planning, processing and interpretation of seismic data services, one of our largest investments is in our employees, which involves cash expenditures for their salaries, bonuses, payroll taxes and related compensation expenses. Our working capital requirements may change from time to time depending upon many factors, including our operating results and adjustments in our operating plan required in response to industry conditions, competition, acquisition opportunities and unexpected events. In recent years, our primary sources of funds have been cash flows generated from our operations, our existing cash balances, debt and equity issuances and borrowings under our revolving credit and term loan facilities (see *Revolving Line of Credit and Term Loan Facilities* below)

At December 31, 2009, our outstanding credit facilities and debt consisted of:

- Our Amended Credit Facility, comprised of:
  - An amended revolving line of credit sub-facility (including the additional $40.0 million of revolving credit indebtedness evidenced by the Convertible Notes); and
  - A $125.0 million original principal amount term loan;
- A $20.0 million secured equipment financing term loan; and
- A $35.0 million Amended and Restated Subordinated Promissory Note.

Revolving Line of Credit and Term Loan Facilities. In July 2008, we, ION Sàrl, and certain of our domestic and other foreign subsidiaries (as guarantors) entered into a $100 million amended and restated revolving credit facility under the terms of an amended credit agreement with our commercial bank lenders (this agreement, as it has been further amended, is referred to our Amended Credit Agreement). The revolving credit facility terminates on July 3, 2013. This amended and restated revolving credit facility provided us with additional flexibility for our international capital needs by not only permitting borrowings by one of our foreign subsidiaries under the facility but also providing us the ability to borrow in alternative currencies.

On September 17, 2008, we added a new $125.0 million term loan sub-facility under the Amended Credit Agreement, and borrowed $125.0 million in term loan indebtedness and $72.0 million under the revolving credit sub-facility to fund a portion of the cash consideration for the ARAM acquisition.

The interest rate on borrowings under our Amended Credit Facility is, at our option, (i) an alternate base rate (either the prime rate of HSBC Bank USA, N.A., or a federals funds effective rate plus 0.50%, plus an applicable interest margin) or (ii) for Eurodollar borrowings and borrowings in Euros, pounds sterling or Canadian dollars, a LIBOR-based rate, plus an applicable interest margin. The amount of the applicable interest margin is determined by reference to a leverage ratio of total funded debt to consolidated EBITDA for the four most recent trailing fiscal quarters. The interest rate margins currently range from 2.875% to 5.5% for alternate base rate borrowings, and from 3.875% to 6.5% for Eurodollar borrowings. As of December 31, 2009, both the $101.6 million in term loan indebtedness under the Amended Credit Facility and the $118.0 million in total revolving credit indebtedness under the Amended Credit Facility accrued interest at the then-applicable LIBOR-based interest rate of 6.7% per annum. The average effective interest rates for the quarter ended December 31, 2009 under the LIBOR-based rates for both the term loan indebtedness and the revolving credit indebtedness were 6.2%.

At March 31, 2009, we were in compliance with all of the financial covenants under the terms of the Amended Credit Facility. However, based upon our results for that quarter and our then-current operating forecast for the remainder of 2009, we determined that it was probable that, if we did not take any mitigating actions, we would not be in compliance for the period ending September 30, 2009 with one or more financial covenants under the Amended Credit Facility s debt agreements. As a result, we approached the lenders under the Amended Credit Facility to obtain amendments to relax certain of these financial covenants and pursued the private placement of our common stock, which, along with our cash on hand, generated sufficient funds to repay the outstanding indebtedness under a bridge loan agreement that we had entered into with Jefferies Finance, LLC in December 2008. See further discussion of the private placement transaction below at *Private Placement of 18.5 Million Shares of Common Stock.*

Fifth Amendment to Amended Credit Facility. In June 2009, we entered into an additional amendment (the Fifth Amendment) to our Amended Credit Facility that, among other things, modified certain of the financial and other covenants contained in the Amended Credit Facility and permitted us to repay our Jefferies bridge loan indebtedness. Principal modifications to the terms of the Amended Credit Agreement resulting from the Fifth Amendment included the following:

- An increase in applicable maximum interest rate margins in the event that our leverage ratio exceeds 2.25 to 1.0 from 4.5% to up to 5.5% for alternate base rate loans, and from 5.5% to up to 6.5% for LIBOR-rate loans;
- A modified restricted payments covenant that permitted us to apply up to $6.0 million of our available cash on hand to prepay the indebtedness under the Jefferies bridge loan agreement;
- A new defined term, Excess Cash Flow, and a new requirement for us to apply 50% of our Excess Cash Flow, if any, calculated with respect to a just-completed fiscal year, to the prepayment of the term loan under the Amended Credit Agreement if our fixed charge coverage ratio or our leverage ratio for the just-completed fiscal year does not meet certain requirements; and
- An amendment to fix the maximum revolving credit facility (accordion feature) amount to which the Amended Credit Facility could be increased at $140.0 million.

The Amended Credit Agreement contains covenants that restrict us, subject to certain exceptions, from:

- Incurring additional indebtedness (including capital lease obligations), granting or incurring additional liens on our properties, pledging shares of our subsidiaries, entering into certain merger or other similar transactions, entering into transactions with affiliates, making certain sales or other dispositions of assets, making certain investments, acquiring other businesses and entering into certain sale-leaseback transactions with respect to certain of our properties;
- Paying cash dividends on our common stock and repurchasing and acquiring shares of our common stock unless (i) there is no event of default under the Amended Credit Facility and (ii) the amount of cash used for cash dividends, repurchases and acquisitions does not, in the aggregate, exceed an amount equal to the excess of 30% of our domestic consolidated net income for our most recently completed fiscal year over $15.0 million.

The Amended Credit Facility requires us to be in compliance with certain financial covenants, including requirements for us and our domestic subsidiaries to:

- maintain a minimum fixed charge coverage ratio (which must be not less than 1.10 to 1.0 for the fiscal quarter ended December 31, 2009; 1.15 to 1.0 for the fiscal quarter ending March 31, 2010; 1.25 to 1.0 for the fiscal quarter ending June 30, 2010; 1.35 to 1.0 for the fiscal quarter ending September 30, 2010; and 1.50 to 1.0 the fiscal quarter ending December 31, 2010 and thereafter);
- not exceed a maximum leverage ratio (3.00 to 1.0 for the fiscal quarters ended December 31, 2009; 2.75 to 1.0 for the fiscal quarter ending March 31, 2010 and June 30, 2010; 2.5 to 1.0 for the fiscal quarter ending September 30, 2010; and 2.25 to 1.0 the fiscal quarter ending December 31, 2010 and thereafter); and
- maintain a minimum tangible net worth of at least 80% of our tangible net worth as of September 18, 2008 (the date that we completed our acquisition of ARAM), plus 50% of our consolidated net income for each quarter thereafter, and 80% of the proceeds from any mandatorily convertible notes and preferred and common stock issuances for each quarter thereafter.

The term loan indebtedness we borrowed under the Amended Credit Facility is subject to scheduled quarterly amortization payments of $4.7 million per quarter until December 31, 2010. On that date, the quarterly principal amortization increases to $6.3 million per quarter until December 31, 2012, when the quarterly principal amortization amount increases to $9.4 million for each quarter until maturity on September 17, 2013. The term loan indebtedness matures on September 17, 2013, but the administrative agent under the Amended Credit Facility may accelerate the maturity date to a date that is six months prior to the maturity date of any additional debt financing that we may incur to refinance certain indebtedness incurred in connection with the ARAM acquisition**,** by giving us written notice of such acceleration between September 17, 2012 and October 17, 2012.

The Amended Credit Facility contains customary event of default provisions (including an event of default upon any change of control event affecting us), the occurrence of which could lead to an acceleration of ION s obligations under the Amended Credit Facility.

Sixth Amendment to Amended Credit Facility. On October 23, 2009, we entered into a Sixth Amendment to the Amended and Restated Credit Agreement that, among other things, (i) increased the aggregate revolving commitment amount under the Amended Credit Facility from $100.0 million to $140.0 million, (ii) permitted Bank of China, New York Branch, to join the Amended Credit Facility, (iii) modified, or provided limited waivers of, certain of the financial and other covenants contained in the Amended Credit Facility (including waivers to the extent necessary to permit the issuance of the BGP Warrant) and (iv) permitted the principal amount of the new revolving credit loans from Bank of China (as evidenced by the Convertible Notes) to be convertible into shares of our common stock. We borrowed on October 27, 2009 an aggregate of $40.0 million in revolving credit indebtedness under the Amended Credit Facility (as amended by the Sixth Amendment), pursuant to the Convertible Notes. The Convertible Notes were issued by ION Geophysical Corporation and ION Sàrl to Bank of China under the terms and conditions of the Amended Credit Facility. The outstanding indebtedness under the Convertible Notes is currently scheduled to mature on the maturity date of the revolving credit indebtedness under the Amended Credit Facility, which is July 3, 2013.

Under the terms of the Amended Credit Agreement, up to $84.0 million (or its equivalent in foreign currencies) is available for non-U.S. borrowings by ION Sàrl and up to $105.0 million is available for domestic borrowings in the U.S.; however, the total level of outstanding borrowings under the revolving credit facility cannot exceed $140.0 million. Revolving credit borrowings under the Amended Credit Facility are available to fund our working capital needs, to finance acquisitions, investments and share repurchases and for general corporate purposes. In addition, the Amended Credit Facility includes a $35.0 million sub-limit for the issuance of documentary and stand-by letters of credit, of which $1.2 million was outstanding at December 31, 2009. Borrowings under the Amended Credit Facility may be prepaid without penalty.

As a result of our October 2009 bridge financing arrangements with Bank of China in connection with the Sixth Amendment, we believe that our liquidity will be sufficient to fund our operations for the first quarter of 2010. The execution of the Sixth Amendment, which included waivers of the financial covenants contained in the Amended Credit Facility for the fiscal quarters ending September 30, 2009, December 31, 2009, March 31, 2010 and June 30, 2010, should enable us to conduct our operations without defaulting under the Amended Credit Facility until the transactions with BGP are completed, which we currently believe will occur in March 2010. Without these waivers, we would not have been in compliance with certain of our financial covenants at September 30, 2009 or December 31, 2009.

If the proposed transactions under the Term Sheet are not completed by March 31, 2010, then the current waivers, upon notice from the lenders after a designated period of time, would cease to be effective and we, at that time, would likely not be in compliance with certain of the financial covenants contained in the Amended Credit Facility, which could then result in an event of default. As the current waivers cover a period of less than twelve months from December 31, 2009, we have classified our long-term indebtedness under our revolving line of credit and term loan facility under the Amended Credit Facility as current at December 31, 2009. As a result of the cross-default provisions in our secured equipment financing and our amended and restated subordinated seller note, we have also classified these long-term obligations as current at December 31, 2009.

Even though we believe the joint venture with BGP will be completed as planned, there are certain events outside of our control (such as our experiencing a material adverse event or condition that results in a material adverse effect on our business, its prospects or results of operations) that could cause the closing of the joint venture to be delayed, terminated or abandoned. In such event, we would need to seek to amend, or seek additional covenant waivers under, the Amended Credit Facility. Even though the lenders under the Amended Credit Facility have demonstrated their willingness to work with us in amending or providing sufficient waivers to our facility, there can be no assurance that we would be able to obtain any such waivers or amendments in the future. If we were unable to obtain such waivers or amendments from the lenders, we would likely seek to replace or pay off the Amended Credit Facility with new secured debt, unsecured debt or equity financing.

Convertible Notes and Warrant. On October 27, 2009, we borrowed an aggregate of $40.0 million in the form of revolving credit bridge financing arranged by BGP from Bank of China, New York Branch, which was evidenced by the Convertible Notes. This borrowing was permitted by the terms of the Sixth Amendment to the Credit Facility, which increased the aggregate revolving commitment amount under the accordion feature provisions of the Amended Credit Facility from $100.0 million to $140.0 million and

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permitted Bank of China to join the Amended Credit Facility as a lender. As further described above, the total outstanding indebtedness under the Amended Credit Facility, which includes the Bank of China bridge loans, was $118.0 million, excluding the non-cash debt discount, at December 31, 2009.

The Convertible Notes, issued in October 2009 in connection with the execution of the Term Sheet with BGP, provide that at the stated initial conversion price of $2.80 per share, the full $40.0 million principal amount under the Convertible Notes would be convertible into 14,285,714 shares of Common Stock. The Convertible Notes provide that the conversion price and the number of shares into which the notes may be converted are subject to adjustment under certain terms and conditions similar to those contained in the Warrant.

As part of BGP arranging for the Bank of China to join our Amended Credit Facility, we granted to BGP the Warrant. The Warrant will be exercisable, in whole or in part, at any time and from time to time, subject to the conditions described below. The Warrant will initially entitle the holder thereof to purchase a number of shares of common stock equal to $40.0 million divided by the exercise price of $2.80 per share, subject to adjustment as described below. At the initial exercise price of $2.80 per share, at such time as the Warrant becomes exercisable, it would initially be fully exercisable for 14,285,714 shares of common stock.

The Warrant will only become exercisable and the Convertible Notes will only become convertible upon receipt of certain governmental approvals. Any conversions of the Convertible Notes and prior exercises of the Warrant will reduce the dollar amount under the Warrant into which the exercise price may be divided to determine the number of shares that may be acquired upon exercise.

The exercise price under the Warrant and conversion prices under the Convertible Notes will be subject to adjustment upon the occurrence of a Triggering Event. A Triggering Event will occur in the event that the joint venture transactions cannot be completed by March 31, 2010, solely as a result of the occurrence of a statement, order or other indication from any relevant governmental regulatory agency that (a) the transactions would not be approved, would be opposed, objected to or sanctioned or (b) the transactions or BGP s business and operations would be required to be altered (or upon the earlier abandonment of such transactions due to any such statement, indication or order). In such event, the exercise price and conversion price per share will be adjusted (but not to an amount that exceeds $2.80 per share) to a price per share that is equal to 75% of the lowest trading price of our common stock over a ten-consecutive-trading-day period, beginning on and inclusive of the first trading day following the public announcement of any failure to complete such transactions (or the abandonment thereof), which failure of abandonment was the result of the Triggering Event. The exercise price of the Warrant and conversion prices of the Convertible notes are also subject to certain customary anti-dilution adjustment.

The Warrant provides for certain cashless exercise rights that are exercisable by the holder of the Warrant in the event that certain governmental approvals from the People s Republic of China permitting the exercise of the Warrant for cash are not obtained.

At the same time as the closing of the joint venture transactions, all of the then-outstanding principal amounts under the Convertible Notes will be automatically converted into shares of common stock unless, at the option of the holder of the Warrant, the holder elects to exercise the Warrant in whole or in part, in lieu of the full conversion of such remaining principal amounts under the Convertible Notes.

Assuming that no adjustments occur to the exercise or conversion prices of (or the number of shares to be issued under) the Warrant or the Convertible Notes prior to closing the joint venture transactions, the Term Sheet provides that at the closing of the transactions, BGP would purchase directly from us a number of shares of Common Stock at a purchase price of $2.80 per shares such that, when added to the total number of shares of Common Stock that may have been previously issued pursuant to conversion of the Convertible Notes and/or exercise of the Warrant, BGP (and its transferees and permitted assignees) would own, together, before giving effect to the issuance of those shares, approximately 19.99% of the issued and outstanding shares of our Common Stock (i.e. 23,789,536 shares).

See further discussion of the accounting impact of the Warrant at *Critical Accounting Policies and Estimates Fair Value of the Warrant.*

Secured Equipment Financing. On June 29, 2009, we entered into a $20.0 million secured equipment financing transaction with ICON ION, LLC (ICON), an affiliate of ICON Capital Inc. Two master loan agreements were entered into with ICON in connection with this transaction: (i) we, ARAM Rentals Corporation, a Nova Scotia unlimited company (ARC), and ICON entered into a Canadian Master Loan and Security Agreement dated as of June 29, 2009 with regard to certain equipment leased to customers by

ARC, and (ii) we, ARAM Seismic Rentals, Inc., a Texas corporation (ASRI), and ICON entered into a Master Loan and Security Agreement (U.S.) dated as of June 29, 2009 with regard to certain equipment leased to customers by ASRI (collectively, the ICON Loan Agreements). All borrowed indebtedness under the ICON Loan Agreements is scheduled to mature on July 31, 2014. We used the proceeds of the secured term loans for working capital and general corporate purposes.

Under the terms of the ICON Loan Agreements, ICON advanced $12.5 million on June 29, 2009 and $7.5 million on July 20, 2009. The indebtedness under the ICON Loan Agreements is secured by first-priority liens in (a) certain of our ARAM seismic rental equipment located in the United States and Canada (subject to certain exceptions), and certain additional and replacement seismic equipment, (b) written leases or other agreements evidencing payment obligations relating to the leasing by ARC or ASRI of this equipment to their respective customers, including their related receivables, (c) the cash or cash equivalents held by such subsidiaries and (d) any proceeds thereof.

The obligations of each of ARC and ASRI under the ICON Loan Agreements are guaranteed by us under a Guaranty dated as of June 29, 2009 (the ICON Guaranty). The ICON Loan Agreements and the ICON Guaranty constitute permitted indebtedness under the Amended Credit Facility.

Under both ICON Loan Agreements, interest on the outstanding principal amount will accrue at a fixed interest rate of 15% per annum calculated monthly, and is payable monthly on the first day of each month. Principal and interest are payable, commencing on September 1, 2009, in 60 monthly installments until the maturity date, when all remaining outstanding principal and interest will be due and payable. Pursuant to the ICON Loan Agreements, in connection with the closing in June 2009, ARC and ASRI paid ICON a non-refundable upfront fee of $0.3 million. In addition, ICON will receive an administrative fee equal to 0.5% of the aggregate principal amount of advances under the ICON Loan Agreements, payable at the end of each of the first four years during their terms. Inclusive of these additional fees, the effective interest rate on the ICON loan was 16.3% as of December 31, 2009.

Beginning on August 1, 2012, and continuing until January 31, 2014, we may prepay the outstanding principal balances of the loans in full by giving ICON 30 days prior written notice and paying a prepayment fee equal to 3.0% of the then-outstanding principal amount of the loans. Commencing on February 1, 2014, the loans may be prepaid in full without payment of any prepayment penalty or fee, subject to our giving ICON 30 days prior written notice.

The ICON Loan Agreements contain certain cross-default provisions with respect to defaults under our Amended Credit Facility. Therefore, similar to the current classification of the Amended Credit Facility indebtedness, we have also classified this long-term indebtedness as current.

Assuming that the BGP joint venture transaction is completed as planned, we anticipate that the primary obligation to repay the ICON indebtedness will be assumed by the joint venture, and the obligations under the Guaranty will be assumed by a joint venture entity, although it is also expected that we would remain secondarily liable on the Guaranty by backstopping the joint venture entity s guaranty of the primary repayment obligations.

Amended and Restated Subordinated Seller Note. As part of the purchase price for the ARAM acquisition, one of our subsidiaries issued an unsecured senior promissory note (the Senior Seller Note) in the original principal amount of $35.0 million to Maison Mazel Ltd., one of the selling shareholders of ARAM. On December 30, 2008, in connection with other acquisition refinancing transactions that were completed on that date, the Senior Seller Note was amended and restated pursuant to an Amended and Restated Subordinated Promissory Note (the Amended and Restated Subordinated Note) issued to Maison Mazel, the selling shareholder. The principal amount of the Amended and Restated Subordinated Note is $35.0 million and matures on September 17, 2013. We also entered into a guaranty dated December 30, 2008, whereby we guaranteed on a subordinated basis the subsidiary s repayment obligations under the Amended and Restated Subordinated Note.

Effective April 9, 2009, (i) the subsidiary transferred the Amended and Restated Subordinated Note to us and we assumed in full the obligations of ION Sub under such note, and (ii) our guaranty of payment of the indebtedness under the Amended and Restated Subordinated Note was terminated. The subsidiary was also released from its obligations under the Amended and Restated Promissory Note by Maison Mazel.

Interest on the outstanding principal amount under the Amended and Restated Subordinated Note accrues at the rate of fifteen percent (15%) per annum, and is payable quarterly.

The terms of the Amended and Restated Subordinated Note provide that the particular covenants contained in the Amended Credit Agreement (or in any successor agreement or instrument) that restricts our ability to incur additional indebtedness will be incorporated into the Amended and Restated Subordinated Note. However, under the Amended and Restated Subordinated Note, neither Maison Mazel nor any other holder of the Amended and Restated Subordinated Note will have a separate right to consent to or approve any amendment or waiver of the covenant as contained in the Amended Credit Facility.

In addition, we have agreed that if we incur indebtedness under any financing that:

- qualifies as Long Term Junior Financing (as defined in the Amended Credit Agreement),
- results from a refinancing or replacement of the Amended Credit Facility such that the aggregate principal indebtedness (including revolving commitments) thereunder would be in excess of $275.0 million, or
- qualifies as unsecured indebtedness for borrowed money that is evidenced by notes or debentures, has a maturity date of at least five years after the date of its issuance and results in total gross cash proceeds to us of not less than $40.0 million,

then we will be obligated to repay in full from the total proceeds from such financing the then-outstanding principal of and interest on the Amended and Restated Subordinated Note.

The indebtedness under the Amended and Restated Subordinated Note is subordinated to the prior payment in full of our Senior Obligations, which are defined in the Amended and Restated Subordinated Note as the principal, premium (if any), interest and other amounts that become due in connection with:

- our obligations under the Amended Credit Facility,
- our liabilities with respect to capital leases and obligations that qualify as a Sale/Leaseback Agreement (as that term is defined in the Amended Credit Agreement),
- guarantees of the indebtedness described above, and
- debentures, notes or other evidences of indebtedness issued in exchange for, or in the refinancing of, the Senior Obligations described above, or any indebtedness arising from the payment and satisfaction of any Senior Obligations by a guarantor.

It is contemplated that at the closing of the joint venture transactions, we will obtain sources of financing sufficient to enable us to repay in full the indebtedness under the Amended and Restated Subordinated Note.

The Amended and Restated Subordinated Seller Note contains certain cross-default provisions with respect to defaults and acceleration of indebtedness under our Amended Credit Facility. Therefore, similar to the current classification of the Amended Credit Facility, we have also classified this long-term indebtedness as current.

Private Placement of 18.5 Million Shares of Common Stock. On June 4, 2009, we completed the offering and sale of 18,500,000 shares of our common stock in privately-negotiated transactions with several institutional investors. The purchase price per share of common stock sold was $2.20, representing total gross proceeds of approximately $40.7 million. The net proceeds from the offering of $38.2 million were applied, along with $2.6 million of our cash on hand, to repay in full the outstanding indebtedness under the Bridge Loan Agreement. In accordance with the terms of the stock purchase agreements, we filed with the SEC on June 11, 2009, a registration statement with respect to potential resales of the shares purchased by the investors, which was declared effective on June 19, 2009. The offering and sale by us of the shares of common stock in the private placement were not registered under the Securities Act of 1933, as amended, in reliance on an exemption from the registration requirements of that Act.

Cumulative Convertible Preferred Stock. During 2005, we entered into an Agreement dated February 15, 2005 with Fletcher (this Agreement, as amended to the date hereof, is referred to as the Fletcher Agreement) and issued to Fletcher 30,000 shares of our Series D-1 Preferred Stock in a privately-negotiated transaction, receiving $29.8 million in net proceeds. The Fletcher Agreement also provided to Fletcher an option to purchase up to an additional 40,000 shares of additional series of preferred stock from time to time, with each series having a conversion price that would be equal to 122% of an average daily volume-weighted market price of our common stock over a trailing period of days at the time of issuance of that series. In 2007 and 2008, Fletcher exercised this option and purchased 5,000 shares of Series D-2 Preferred Stock for $5.0 million (in December 2007) and the remaining 35,000 shares of Series D-3 Preferred Stock for $35.0 million (in February 2008). Fletcher remains the sole holder of all of our outstanding shares of Series D Preferred Stock. Dividends on the shares of Series D Preferred Stock must be paid in cash.

Under the Fletcher Agreement, if a 20-day volume-weighted average trading price per share of our common stock fell below $4.4517 (the Minimum Price), we were required to deliver a notice (the Reset Notice) to Fletcher. On November 28, 2008, the 20-day volume-weighted average trading price per share of our common stock on the New York Stock Exchange for the previous 20 trading days was calculated to be $4.328, and we delivered the Reset Notice to Fletcher in accordance with the terms of the Fletcher Agreement. In the Reset Notice, we elected to reset the conversion prices for the Series D Preferred Stock to the Minimum Price ($4.4517 per share), and Fletcher s redemption rights were terminated. The adjusted conversion price resulting from this election was effective on November 28, 2008.

In addition, under the Fletcher Agreement, the aggregate number of shares of common stock issued or issuable to Fletcher upon conversion or redemption of, or as dividends paid on, the Series D Preferred Stock could not exceed a designated maximum number of shares (the Maximum Number), and such Maximum Number could be increased by Fletcher providing us with a 65-day notice of increase, but under no circumstance could the total number of shares of common stock issued or issuable to Fletcher with respect to the Series D Preferred Stock ever exceed 15,724,306 shares. The Fletcher Agreement had designated 7,669,434 shares as the original Maximum Number. On November 28, 2008, Fletcher purported to deliver a second notice to us to increase the Maximum Number to 9,669,434 shares, effective February 1, 2009. On September 15, 2009, Fletcher delivered a notice to us purporting to increase the Maximum Number from 9,669,434 shares to 11,669,434 shares, to become effective on November 19, 2009. We believe that our agreement with Fletcher gives Fletcher the right to issue only one notice to increase the Maximum Number. On November 6, 2009, we filed an action in the Court of Chancery of the State of Delaware seeking a declaration that, under the relevant agreement, Fletcher is permitted to deliver only one notice to increase the Maximum Number and that its purported second notice is legally invalid.

The conversion prices and number of shares of common stock to be acquired upon conversion are also subject to customary anti-dilution adjustments. Converting the shares of Series D Preferred Stock at one time could result in significant dilution to our stockholders that could limit our ability to raise additional capital. Certain rights and obligations of Fletcher and our company pertaining to the Series D Preferred Stock are currently the subject of pending litigation in the Chancery Court of the State of Delaware. See Item 3. *Legal Proceedings* and Item 1A. *Risk Factors* .

Meeting our Liquidity Requirements

As of December 31, 2009, our total outstanding indebtedness (including capital lease obligations) was approximately $277.4 million, net of a $8.7 million non-cash debt discount, consisting of approximately $101.6 million in borrowings under the term loans and $118.0 million, excluding the non-cash debt discount, in revolving credit indebtedness under the Amended Credit Facility, $19.1 million of borrowings under our new secured equipment financing and $35.0 million of outstanding subordinated indebtedness under the Amended and Restated Subordinated Note. The repayment in full in June 2009 of the $40.0 million bridge loan agreement indebtedness was significant because it represented at that time short-term indebtedness that was scheduled to mature in January 2010. Inclusive of the additional fees (and an upfront fee previously paid of 5.0%), the effective interest rate under the Bridge Loan Agreement was 25.3% at the time of repayment. Currently, under their terms, none of our principal debt facilities mature prior to 2013.

We had disclosed in our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009 that, as a result of our entering into the Fifth Amendment, repaying the indebtedness outstanding under the Bridge Loan Agreement and entering into the secured equipment financing transaction in June 2009, we expected that we would remain in compliance with the financial covenants under the Amended Credit Facility and that our cash on hand and cash generated from our operations would be sufficient to fund our operations for the remainder of 2009. However, lower-than-expected sales revenues realized during the third quarter of 2009 resulted in a high likelihood that, as of September 30, 2009, we would not be in compliance with certain of such financial covenants. As a result, we entered into the Sixth Amendment of our Amended Credit Facility, which, among other things, included waivers of the financial covenants contained in the Amended Credit Facility for the fiscal quarters ending September 30, 2009, December 31, 2009, March 31, 2010 and June 30, 2010. These waivers should enable us to conduct our operations without defaulting under the Amended Credit Facility until the transactions with BGP are completed, which we currently believe will occur in March 2010. Without these waivers, we would not have been in compliance with certain of our financial covenants at September 30, 2009 or December 31, 2009.

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As a result of obtaining the $40.0 million of additional revolving credit indebtedness under the Convertible Notes in October 2009 and entering into the Sixth Amendment, we believe that our liquidity will be sufficient to fund our operations until such time as the transactions with BGP are completed or alternate financing could be obtained.

If the proposed transactions under the Term Sheet with BGP are not completed by March 31, 2010, then the current waivers, upon notice from the lenders after a designated period of time, would cease to be effective and we at that time would likely not be in compliance with certain of the financial covenants contained in the Amended Credit Facility, which could then result in an event of default. As the current waivers cover a period of less than twelve months from December 31, 2009, we have classified our long-term indebtedness under our revolving line of credit and term loan facility under the Amended Credit Facility as current at December 31, 2009. As a result of the cross-default provisions in our secured equipment financing and our amended and restated subordinated seller note, we have also classified these long-term obligations as current at December 31, 2009.

Even though we believe the joint venture with BGP will be completed as planned, there are certain events outside of the our control (such as us experiencing a material adverse event or condition that results in a material adverse effect on our business, our prospects or results of operations) that could cause the closing of the joint venture to be delayed, terminated or abandoned. In such event, we would need to seek to amend, or seek additional covenant waivers under, the Amended Credit Facility. Even though the lenders under the Amended Credit Facility have demonstrated their willingness to work with us in amending or providing sufficient waivers to its facility, there can be no assurance that we would be able to obtain any such waivers or amendments in the future. If we were to be unable to obtain such waivers or amendments from the lenders, we would likely seek to replace or pay off the Amended Credit Facility with new secured debt, unsecured debt or equity financing.

As part of the formation of the joint venture, we have been in discussions with various financial institutions (both domestic and international) on the refinancing of our debt. As a result of these discussions and with the recent improvements within the financial markets, we believe that in the unlikely event the joint venture is not completed as planned, we would be able to obtain additional debt or equity financings prior to defaulting on our current debt obligations. However, there also can be no assurance that such debt or equity financing would be available on terms acceptable to us or at all.

For the year ended December 31, 2009, total capital expenditures, including investments in our multi-client data library, were $92.6 million, and we are projecting capital expenditures for the year 2010 to be between $100 million to $110 million. If there continues to be weak demand for our products and services, we would expect continued reduced levels of capital expenditures, which may, in turn, lessen our requirements for working capital. Of the total projected 2010 capital expenditures, we are estimating that approximately $90 million to $100 million will be spent on investments in our multi-client data library, but we are anticipating that most of these investments will be underwritten by our customers. To the extent our customers commitments do not reach an acceptable level of pre-funding, the amount of our anticipated investment in these data libraries could be significantly less.

Cash Flow from Operations

We have historically financed our operations from internally generated cash and funds from equity and debt financings.

Cash and cash equivalents were $16.2 million at December 31, 2009, a decrease of $19.0 million compared to December 31, 2008. Net cash provided by operating activities was $52.0 million for the year ended December 31, 2009, compared to $111.7 million for the year ended December 31, 2008. The decrease in our cash flows from operations was due in part to the decrease in revenues and our results of operations for 2009 compared to our results for 2008. The decrease in our results of operations is more fully described at *Results of Operations Year Ended December 31, 2009 Compared to Year Ended December 31, 2008*. The decline in our revenues, combined with an increase in our receivables collection efforts, resulted in reductions in our account receivables and unbilled receivables balances. Also, during 2009 we made significant payments to our vendors related to our outstanding inventory purchase obligations. We have reduced, and will continue to reduce, our inventory purchase obligations and costs and expenses for our manufacturing activities, until such time as we experience increased levels of customer demand for our products. For example, we have decreased our contractual inventory purchase obligations to $21.4 million at December 31, 2009 compared to $72.6 million at December 31, 2008. We believe that a majority of our equipment sales in 2010 will be produced from our current inventories rather than from the purchase or manufacture of new inventories.

Cash and cash equivalents were $35.2 million at December 31, 2008, a decrease of $1.2 million compared to December 31, 2007. Net cash provided by operating activities was $111.7 million for the year ended December 31, 2008, compared to $93.8 million for the year ended December 31, 2007. The increase in cash flows from operations was due in part to our decreased receivables balance, an increase in our accounts payable and accrued expenses which was primarily due to our inventory purchases and timing of our vendor

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payments. The decline in our revenues, particularly in the fourth quarter of 2008 compared to 2007, combined with an increase in our receivables collection efforts, resulted in reductions in our accounts receivables balances. Our investment in inventories was mainly due to inventory orders and purchases that occurred prior to the economic downturn. As a result of the economic downturn, we are focused on reducing our inventory purchase obligations and costs and expenses for our manufacturing activities. Our contractual inventory purchase obligations decreased from $107.0 million outstanding at December 31, 2007 to $72.6 million at December 31, 2008.

Cash Flow from Investing Activities

Net cash flow used in investing activities was $91.6 million for the year ended December 31, 2009, compared to $354.6 million for the year ended December 31, 2008. The principal uses of our cash for investing activities during the year ended December 31, 2009 were a $89.6 million investment in our multi-client data library and $3.0 million of equipment and rental equipment purchases.

Net cash flow used in investing activities was $354.6 million for the year ended December 31, 2008, compared to $76.0 million for the year ended December 31, 2007. The principal uses of our cash for investing activities during the year ended December 31, 2008 were $242.8 million expended to acquire ARAM in September 2008, $17.5 million of equipment and rental equipment purchases and a $110.4 million investment in our multi-client data library. This was partially offset by $10.7 million of cash we acquired in the ARAM acquisition and proceeds from the sale of assets and rental assets of $5.4 million.

Cash Flow from Financing Activities

Net cash flow provided by financing activities was $19.7 million for the year ended December 31, 2009, compared to $244.3 million for the year ended December 31, 2008. The net cash flow provided by financing activities during 2009 primarily consisted of $52.0 million in net borrowings under our revolving credit facility, net proceeds from the ICON secured rental equipment financing transaction of $19.2 million, and the net proceeds of $38.2 million from a private placement of our common stock in June 2009. This cash inflow was partially offset by scheduled principal payments on our term loan under our Amended Credit Facility, the prepayment of the principal balance on the Jefferies bridge loan indebtedness and payments under our other notes payable and capital lease obligations all totaling $81.5 million. Additionally, we paid $3.5 million in cash dividends on our outstanding Series D-1, Series D-2 and Series D-3 Preferred Stock and $4.6 million in financing costs related to our debt transactions and amendments to our debt facilities during the twelve months ended December 31, 2009.

Net cash flow provided by financing activities was $244.3 million for the year ended December 31, 2008, compared to $0.8 million for the year ended December 31, 2007. The net cash flow provided by financing activities during 2008 was primarily related to $160.3 million of net proceeds from acquisition debt we borrowed to purchase ARAM, $66.0 million of net borrowings on our revolving credit facility, $35.0 million in proceeds from the issuance and sale of our Series D-3 Preferred Stock in February 2008 and $6.3 million in proceeds related to the exercise of stock options and stock purchases by our employees under our employee plans. This cash inflow was partially offset by scheduled principal payments of $18.1 million on our notes payable and capital lease obligations and $3.9 million in cash dividends paid on our outstanding Series D-1, Series D-2 and Series D-3 Preferred Stock.

Inflation and Seasonality

Inflation in recent years has not had a material effect on our costs of goods or labor, or the prices for our products or services. Traditionally, our business has been seasonal, with strongest demand in the fourth quarter of our fiscal year. The fourth quarter of 2009 was not as strong as seen historically because the typical discretionary spending that normally occurs during the fourth quarter was not realized.

Future Contractual Obligations

The following table was compiled based upon the current presentation of our debt in our balance sheet and not on the original terms and maturity dates of the respective debt instruments. The table below also does not include the non-cash debt discount of $8.7 million but instead lists the contractual principal amounts since those amounts will be the principal paid at the termination of the contractual obligations. The following table sets forth estimates of future payments of our consolidated contractual obligations, as of December 31, 2009 (in thousands):

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Contractual Obligations	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Notes payable and long-term debt	$ 279,562	$ 275,905	$ 1,324	$ 1,798	$ 535
Interest on notes payable and long-term debt obligations	16,628	15,544	713	353	18
Equipment capital lease obligations	6,475	3,884	2,591		
Operating leases	46,330	12,603	18,469	8,018	7,240
Product warranty	5,088	5,088			
Purchase obligations	21,430	21,430			
Total	$ 375,513	$ 334,454	$ 23,097	$ 10,169	$ 7,793

The long-term debt and lease obligations at December 31, 2009 included $118.0 million, excluding the $8.7 million non-cash debt discount, of revolving credit indebtedness and $101.6 million under our five-year term loan, in each case incurred under our Amended Credit Facility and maturing in 2013. The remaining amount of these obligations consists of $35.0 million under our Amended and Restated Subordinated Note, $19.1 million under the ICON Loan Agreements, $4.2 million indebtedness related to our Stafford, Texas facility sale-leaseback arrangement and $1.7 million of short-term notes payable. The $6.5 million of capital lease obligations relates to ARAM and GXT s financing of computer and other equipment purchases. The interest on notes payable and long-term debt obligations in the table above are calculated based upon the current presentation of our debt in our balance sheet and not on the original terms and maturity dates of the respective debt instruments. Using the original terms and maturity dates, the interest expense would be $24.8 million for 1-3 years and $8.1 million for 3-5 years. See *Revolving Line of Credit and Term Loan Facilities* above and Note 12 *Notes Payable, Long-term Debt and Lease Obligations.*

Because we may prepay our outstanding revolving credit indebtedness under the Amended Credit Facility at any time, the interest expense is not included in the above table. However, if the outstanding principal of $118.0 million as of December 31, 2009 was not repaid in 2010, the interest expense would be $8.0 million using the interest rate as of December 31, 2009. For further discussion of our notes payable, long-term debt and capital lease obligations, see Note 12 *Notes Payable, Long-term Debt and Lease Obligations.*

The non-cash liability associated with fair value of the Warrant of $44.8 million at December 31, 2009 was not reflected in the above table as its settlement upon exercise is only through issuance of our common shares and does not provide for cash settlement. See further discussion of the accounting impact of the Warrant at *Critical Accounting Policies and Estimates Fair Value of the Warrant.*

The operating lease commitments at December 31, 2009 relate to our leases for certain equipment, offices, processing centers, and warehouse space under non-cancelable operating leases.

The liability for product warranties at December 31, 2009 relate to the estimated future warranty expenditures associated with our products. Our warranty periods generally range from 30 days to three years from the date of original purchase, depending on the product. We record an accrual for product warranties and other contingencies at the time of sale, which is when the estimated future expenditures associated with those contingencies become probable and the amounts can be reasonably estimated. We generally receive warranty support from our suppliers regarding equipment they manufactured. Our purchase obligations primarily relate to our committed inventory purchase orders for which deliveries are scheduled to be made in 2010.

Dividends on our Series D Preferred Stock are payable quarterly and must be paid in cash. In 2009, we paid $3.5 million in dividends on our Series D Preferred Stock. The dividend rate was 5.0% at December 31, 2009. See *Liquidity and Capital Resources* above.

Upon the completion of the joint venture transactions, the ICON Loan Agreements and all outstanding amounts owed under the agreements will be assumed by the joint venture. In addition, we intend to repay the $35.0 million under our Amended and Restated Subordinated Note and the $118.0 million of revolving credit indebtedness from the proceeds of the joint venture transaction. Additionally, as of December 31, 2009, approximately $16.9 million of operating leases, product warranty and purchase obligations related to businesses that will be assumed by the joint venture upon its closing.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States requires management to make choices between acceptable methods of accounting and to use judgment in making estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities, and the reported amounts of revenue and expenses. The following accounting policies are based on, among other things, judgments and assumptions made by management that include inherent risk and uncertainties. Management s estimates are based on the relevant information available at the end of each period. We believe that all of the judgments and estimates used to prepare our financial statements were reasonable at the time we made them, but circumstances may change requiring us to revise our estimates in ways that could be materially adverse to our results of operations and financial condition. Management has discussed these critical accounting estimates with the Audit Committee of our Board of Directors and the Audit Committee has reviewed our disclosures relating to the estimates in this Management s Discussion and Analysis.

Revenue Recognition and Product Warranty. We derive revenue from the sale and rental of (i) acquisition systems and other seismic equipment within our Land Imaging Systems and Marine Imaging Systems segments; (ii) imaging services, multi-client surveys and licenses of off-the-shelf data libraries within our ION Solutions segment; and (iii) navigation, survey and quality control software systems within our Data Management Solutions segment.

For the sales of acquisition systems and other seismic equipment, we follow the requirements of ASC 605-10 *Revenue Recognition* and recognize revenue when (a) evidence of an arrangement exists; (b) the price to the customer is fixed and determinable; (c) collectibility is reasonably assured; and (d) the acquisition system or other seismic equipment is delivered to the customer and risk of ownership has passed to the customer, or, in the limited case where a substantive customer-specified acceptance clause exists in the contract, the later of delivery or when the customer-specified acceptance is obtained.

Our Land Imaging Systems segment receives rental income from the rental of seismic equipment. The rental is in the form of operating leases as the lease terms range from a couple of days to several months. Rental revenue is recognized on a straight line basis over the term of the operating lease.

Revenues from all imaging and other services are recognized when persuasive evidence of an arrangement exists, the price is fixed or determinable, and collectibility is reasonably assured. Revenues from contract services performed on a day-rate basis are recognized as the service is performed.

Revenues from multi-client surveys are recognized as the seismic data is acquired and/or processed on a proportionate basis as work is performed. Under this method, we recognize revenues based upon quantifiable measures of progress, such as kilometers acquired or days processed. Upon completion of a multi-client seismic survey, the survey data is considered off-the-shelf and licenses to the survey data are sold to customers on a non-exclusive basis. The license of a completed multi-client survey is represented by the license of one standard set of data. Revenues on licenses of completed multi-client data surveys are recognized when (a) a signed final master geophysical data license agreement and accompanying supplemental license agreement are returned by the customer; (b) the purchase price for the license is fixed or determinable; (c) delivery or performance has occurred; and (d) no significant uncertainty exists as to the customer s obligation, willingness or ability to pay. In limited situations, we have provided the customer with a right to exchange seismic data for another specific seismic data set. In these limited situations, we recognize revenue at the earlier of the customer exercising its exchange right or the expiration of the customer s exchange right.

When separate elements (such as an acquisition system, other seismic equipment and/or imaging services) are contained in a single sales arrangement, or in related arrangements with the same customer, we follow the requirements of ASC 605-25 *Accounting for Multiple-Element Revenue Arrangement,* and allocate revenue to each element based upon its vendor-specific objective evidence of fair value, so long as each such element meets the criteria for treatment as a separate unit of accounting. We limit the amount of revenue recognized for delivered elements to the amount that is not contingent on the future delivery of products or services. We generally do not grant return or refund privileges to our customers. When undelivered elements, such as training courses and engineering services, are inconsequential or perfunctory and not essential to the functionality of the delivered elements, we recognize revenue on the total contract and make a provision for the costs of the incomplete elements.

For the sales of navigation, survey and quality control software systems, we follow the requirements for these transactions of ASC 985-605 *Software Revenue Recognition,* because in those systems the software is more than incidental to the arrangement as a whole. Following the requirements of ASC 985-605 *Applicability of AICPA Statement of Position 97-2 to Non-Software Deliverables in an Arrangement Containing More-Than-Incidental Software*, we consider the hardware within these systems to be a software-related item because the software is essential to the hardware s functionality. As a result, we recognize revenue from sales of navigation, survey and quality control software systems when (a) evidence of an arrangement exists; (b) the price to the customer is fixed and determinable; (c) collectibility is reasonably assured; and (d) the software and software-related hardware is delivered to the customer and risk of ownership has passed to the customer, or, in the limited case where a substantive customer-specified acceptance clause exists in the contract, the later of delivery or when the customer-specified acceptance is obtained.

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These arrangements generally include us providing related services, such as training courses, engineering services and annual software maintenance. We allocate revenue to each element of the arrangement based upon vendor-specific objective evidence of fair value of the element or, if vendor-specific objective evidence is not available for the delivered element, we apply the residual method.

In addition to perpetual software licenses, we offer certain time-based software licenses. For these time-based licenses, we recognize revenue ratably over the contract term, which is generally two to five years.

We generally warrant that our manufactured equipment will be free from defects in workmanship, material and parts. Warranty periods generally range from 30 days to three years from the date of original purchase, depending on the product. We provide for estimated warranty as a charge to costs of sales at the time of sale.

Multi-Client Data Library. Our multi-client data library consists of seismic surveys that are offered for licensing to customers on a non-exclusive basis. The capitalized costs include the costs paid to third parties for the acquisition of data and related activities associated with the data creation activity and direct internal processing costs, such as salaries, benefits, computer-related expenses, and other costs incurred for seismic data project design and management. For the years ended December 31, 2009, 2008 and 2007, we capitalized, as part of our multi-client data library $3.8 million, $5.4 million, and $4.3 million, respectively, of direct internal processing costs.

Our method of amortizing the costs of a multi-client data library available for commercial sale is the greater of (i) the percentage of actual revenue to the total estimated revenue multiplied by the total cost of the project (the sales forecast method) or (ii) the straight-line basis over a four-year period. The sales forecast method is our primary method of calculating amortization. The total amortization period of four years represents the minimum period over which benefits from these surveys are expected to be derived. We have determined the amortization period of four years based upon our historical experience that indicates that the majority of our revenues from multi-client surveys are derived during the acquisition and processing phases and during four years subsequent to survey completion.

Estimated sales are determined based upon discussions with our customers, our experience, and our knowledge of industry trends. Changes in sales estimates may have the effect of changing the percentage relationship of cost of services to revenue. In applying the sales forecast method, an increase in the projected sales of a survey will result in lower cost of services as a percentage of revenue, and higher earnings when revenue associated with that particular survey is recognized, while a decrease in projected sales will have the opposite effect. Assuming that the overall volume of sales mix of surveys generating revenue in the period was held constant in 2009, an increase in 10% in the sales forecasts of all surveys would have decreased our amortization expense by approximately $3.2 million.

We estimate the ultimate revenue expected to be derived from a particular seismic data survey over its estimated useful economic life to determine the costs to amortize, if greater than straight-line amortization. That estimate is made by us at the project s initiation. For a completed multi-client survey, we review the estimate quarterly. If during any such review, we determine that the ultimate revenue for a survey is expected to be more or less than the original estimate of total revenue for such survey, we decrease or increase (as the case may be) the amortization rate attributable to the future revenue from such survey. In addition, in connection with such reviews, we evaluate the recoverability of the multi-client data library, and if required under ASC 360 *Accounting for the Impairment and Disposal of Long-Lived Assets*, record an impairment charge with respect to such data. There were no impairment charges during 2009 and 2008.

Fair Value of the Warrant. We issued the Warrant to BGP as part of our proposed joint venture with them, which included BGP arranging for the Bank of China to join as a new lender to our Amended Credit Facility. The Warrant is required to be accounted for at its fair value with changes in its fair value being recognized below income from operations in the period of change. The fair value of the Warrant was determined using a Black-Scholes model that the value of the features based upon certain key inputs. The key input for the Black-Scholes model is the current market price of our common stock, the yield on our common stock dividend payments (0%), risk-free interest rates, the expected term (March 31, 2010) and our stock s historical and implied volatility. The most significant inputs are the current market price of our common stock. Holding all other inputs constant, a 10% increase or decrease in our common stock price would result in an increase or decrease in the fair value of the warrant liability of $8.4 million and ($8.3 million), respectively.

Reserve for Excess and Obsolete Inventories. Our reserve for excess and obsolete inventories is based on historical sales trends and various other assumptions and judgments, including future demand for our inventory and the timing of market acceptance of our new products. Should these assumptions and judgments not be realized for reasons such as delayed market acceptance of our new products, our valuation allowance would be adjusted to reflect actual results. Our industry is subject to technological change and new product development that could result in obsolete inventory. Our valuation reserve for inventory at December 31, 2009 was $30.6 million compared to $24.1 million at December 31, 2008. The majority of the increase in our reserves for excess and obsolete inventory in 2009 related to our Marine Imaging Systems mature acquisition systems and source products. The increase in our reserves for excess and obsolete inventories in 2008 primarily related to our analog land acquisition systems. As a result of the integration of ARAM into our Land Imaging Systems segment, at the end of 2008, we evaluated and determined that market values of certain of our mature analog products were lower than their then-current book values.

Goodwill and Other Intangible Assets. For purposes of performing the impairment test for goodwill as required by ASC 350, we established the following reporting units: Land Imaging Systems (includes ARAM), Sensor Geophone, Marine Imaging Systems, Data Management Solutions, and ION Solutions. To determine the fair value of our reporting units, we use a discounted future returns valuation method. If we had established different reporting units or utilized different valuation methodologies, our impairment test results could differ.

ASC 350 requires us to compare the fair value of our reporting units to their carrying amount on an annual basis to determine if there is potential goodwill impairment. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded to the extent that the fair value of the goodwill within the reporting units is less than its carrying value.

We completed our annual goodwill impairment testing as of December 31, 2008 and determined that all of the goodwill within our Land Imaging Systems (including ARAM) and ION Solutions reporting units were impaired. As a result, we recorded a goodwill impairment charge of $242.2 million. The decrease in these reporting units fair value was primarily driven by the overall economic and financial crisis and the decrease in the current demand for our land analog acquisition products, especially within North America and Russia.

We completed our annual goodwill impairment testing as of December 31, 2009 and determined that no goodwill was impaired. Our remaining goodwill as of December 31, 2009 was comprised of $27.0 million in our Marine Imaging Systems and $25.1 million in our Data Management Solutions reporting units. Our 2009 annual impairment test indicated that the fair value of these two reporting units significantly exceeded their carrying values by over 50% for each business unit. The analyses are based upon the operating forecasts approved annually by the Board of Directors, which include assumptions about market and economic conditions. However, if our estimates or related projections associated with the reporting units significantly change in the future, we may be required to record further impairment charges. If the operational results of our segments are lower than forecasted or the economic conditions are worse than expected, then the fair value of our segments will be adversely affected.

Our intangible assets other than goodwill relate to proprietary technology, patents, customer relationships, trade names and non-compete agreements that are amortized over the estimated periods of benefit (ranging from 4 to 20 years). Following the guidance of ASC 360, we review the carrying values of these intangible assets for impairment if events or changes in the facts and circumstances indicate that their carrying value may not be recoverable. Any impairment determined is recorded in the current period and is measured by comparing the fair value of the related asset to its carrying value. For the years ended December 31, 2009 and 2008, we determined that certain of the intangible assets (customer relationships, trade names and non-compete agreements) associated with our ARAM acquisition were impaired and recorded impairment charges of $38.0 million and $10.1 million, respectively.

Similar to our treatment of goodwill, in making these assessments we rely on a number of factors including operating results, business plans, internal and external economic projections, anticipated future cash flows and external market data. However, if our estimates or related projections associated with the reporting units significantly change in the future, we may be required to record further impairment charges.

Accounts and Notes Receivable Collectibility. We consider current information and circumstances regarding our customers ability to repay their obligations, such as the length of time the receivable balance is outstanding, the customers credit worthiness and historical experience, and consider an account or note impaired when it is probable that we will be unable to collect all amounts due. When we consider a note receivable as impaired, we measure the amount of the impairment based on the present value of expected future cash flows or the fair value of collateral. We include impairment losses (recoveries) in our allowance for doubtful accounts and notes through an increase (decrease) in bad debt expense.

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We record interest income on investments in notes receivable on the accrual basis of accounting. We do not accrue interest on impaired loans where collection of interest according to the contractual terms is considered doubtful. Among the factors we consider in making an evaluation of the collectibility of interest are: (i) the status of the loan; (ii) the fair value of the underlying collateral; (iii) the financial condition of the borrower; and (iv) anticipated future events.

Stock-Based Compensation. We account for stock based compensation under the recognition provisions of ASC 718 *Share-Based Payment*. We estimate the value of stock option awards on the date of grant using the Black-Scholes option pricing model. The determination of the fair value of stock-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of subjective variables. These variables include, but are not limited to, our expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rate, and expected dividends.

The accompanying financial statements for the twelve months ended December 31, 2009 include approximately $3.3 million of stock-based compensation expense related to 2008, 2007 and 2006. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The prior-period stock-based compensation expense relates to adjustments between estimated and actual forfeitures which should have been recognized over the vesting period of such awards. Such amounts were not deemed material with respect to either the results of prior years or the results and the trend of earnings for the current year and were therefore recorded in 2009.

In 2009, 2008 and 2007, we recognized $12.7 million, $8.3 million and $6.9 million, respectively, of stock-based compensation expense related to our employees outstanding stock-based awards. The total expense in 2009 was comprised of $1.2 million reflected in cost of sales, $0.8 million in research and development expense, $1.5 million in marketing and sales expense, and $9.2 million (including the $3.3 million stock-based compensation charge described above) in general and administrative expense. In addition to the share-based compensation expense related to the Company s plans, we recorded $0.8 million of share-based compensation expense in 2009 related to employee stock appreciation rights. Pursuant to ASC 718, the stock appreciation rights are considered liability awards and, as such, these amounts are accrued in the liability section of the balance sheet.

Recent Accounting Pronouncements

In October 2009, the Financial Accounts Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2009-13 on ASC 605, *Revenue Recognition Multiple Deliverable Revenue Arrangements a consensus of the FASB Emerging Issues Task Force* (ASU 2009-13). ASU 2009-13 amended guidance related to multiple-element arrangements which requires an entity to allocate arrangement consideration at the inception of an arrangement to all of its deliverables based on their relative selling prices. The consensus eliminates the use of the residual method of allocation and requires the relative-selling-price method in all circumstances. All entities must adopt the guidance no later than the beginning of their first fiscal year beginning on or after June 15, 2010. Entities may elect to adopt the guidance through either prospective application for revenue arrangements entered into, or materially modified, after the effective date or through retrospective application to all revenue arrangements for all periods presented. We are currently evaluating the impact, if any, of ASU 2009-13 on our financial position and results of operations.

In October 2009, the FASB issued ASU No. 2009-14 on ASC 985, *Certain Revenue Arrangements That Include Software Elements* (ASU 2009-14). ASU 2009-14 amended guidance that is expected to significantly affect how entities account for revenue arrangements that contain both hardware and software elements. As a result, many tangible products that rely on software will be accounted for under the revised multiple-element arrangements revenue recognition guidance, rather than the software revenue recognition guidance. The revised guidance must be adopted by all entities no later than fiscal years beginning on or after June 15, 2010. An entity must select the same transition method and same period for the adoption of both this guidance and the revisions to the multiple-element arrangements guidance noted above. We are currently evaluating the impact, if any, of ASU 2009-14 on our financial position and results of operations.

In August 2009, the FASB issued ASU 2009-05, *Fair Value Measurements and Disclosures, Measuring Liabilities at Fair Value (Topic 820)* (ASU 2009-05). ASU 2009-05 provides additional clarification on valid valuation techniques using acquired prices in active markets for identical liabilities. The provisions for ASU 2009-05 were effective for interim period ending after August 2009. The adoption of ASU 2009-05 did not have a material impact to the company s financial position, results of operations or cash flows.

In June 2009, the FASB issued ASC 105-10, The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles a replacement of FASB Statement No. 162 (ASC 105-10). ASC 105-10 is the single, official source of authoritative, nongovernmental GAAP, other than guidance issued by the SEC and is effective for interim or annual financial periods ending after September 15, 2009. We adopted this statement on September 15, 2009 and have updated all existing GAAP references to the new codification.

In April 2009, the FASB issued ASC 825-10-65-1, *Interim Disclosures about Fair Value of Financial Instruments* (ASC 825-10-65-1). ASC 825-10-65-1 provides additional clarification on interim disclosures and require public companies to disclose the fair value of financial instruments whenever companies publish interim financial summary information. The provisions for ASC 825-10-65-1 were effective for interim periods ending after June 15, 2009 with earlier adoption permitted. We adopted ASC 825-10-65-1 on the effective date. The adoption of ASC 825-10-65-1 did not have a material impact to our financial position, results of operation or cash flows.

In April 2009, the FASB issued ASC 320-10, *The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments* (ASC 320-10). ASC 320-10 provides additional guidance designed to create greater clarity and consistency in accounting for and presenting impairment losses on securities. This issuance changes (i) the method for determining whether an other-than-temporary impairment exists for debt securities and for cost method investments; and (ii) the amount of an impairment charge to be recorded in earnings. ASC 320-10 was effective for interim and annual periods ending after June 15, 2009. The Company has determined that it is not practicable to estimate the fair value of its cost method investments, as quoted market prices are not available. During 2009, the Company s investment in Colibrys Ltd. was determined to be impaired and was subsequently written off. The aggregate carrying amount of cost method investments was $0.5 million at December 31, 2009, and was included within Other Assets. The adoption of ASC 320-10 did not have a material impact to our financial position, results of operation or cash flows.

In September 2008, the FASB issued ASC 260-10*, Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* (ASC 260-10), which was effective for fiscal years beginning after December 15, 2008. ASC 260-10 would require unvested share-based payment awards containing non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) to be included in the computation of basic earnings per share according to the two-class method. The adoption of ASC 260-10 did not have a material impact on our earnings per share computation.

Credit and Sales Risks

No single customer represented 10% or more of our consolidated net revenues for the years ended December 31, 2009, 2008 and 2007; however, our top five customers in total represented approximately 29%, 30% and 31%, respectively of our consolidated net revenues. The loss of any significant customers or deterioration in our relationship with either customer could have a material adverse effect on our results of operations and financial condition.

For the twelve months ended December 31, 2009, we recognized $92.8 million of sales to customers in Europe, $67.2 million of sales to customers in Asia Pacific, $25.4 million of sales to customers in Africa, $42.4 million of sales to customers in the Middle East, $34.3 million of sales to customers in Latin American countries, and $4.7 million of sales to customers in the Commonwealth of Independent States, or former Soviet Union (CIS). The majority of our foreign sales are denominated in U.S. dollars. For the years ended December 31, 2009 and 2008, international sales comprised 64% and 60%, respectively, of total net revenues. In recent years, the CIS and certain Latin American countries have experienced economic problems and uncertainties. However, given the recent market downturn, more countries and areas of the world have also begun to experience economic problems and uncertainties. To the extent that world events or economic conditions negatively affect our future sales to customers in these and other regions of the world or the collectibility of our existing receivables, our future results of operations, liquidity, and financial condition may be adversely affected. We currently require customers in these higher risk countries to provide their own financing and in some cases assist the customer in organizing international financing and Export-Import credit guarantees provided by the United States government. We do not currently extend long-term credit through notes to companies in countries we consider to be inappropriate for credit risk purposes.

Certain Relationships and Related Party Transactions

James M. Lapeyre, Jr. is chairman of our board of directors. He is also the chairman and a significant equity owner of Laitram, L.L.C. (Laitram) and has served as president of Laitram and its predecessors since 1989. Laitram is a privately-owned, New Orleans-based manufacturer of food processing equipment and modular conveyor belts. Mr. Lapeyre and Laitram together owned approximately 8.1% of our outstanding common stock as of February 22, 2010.

We acquired DigiCourse, Inc., our marine positioning products business, from Laitram in 1998 and have renamed it I/O Marine Systems, Inc. In connection with that acquisition, we entered into a Continued Services Agreement with Laitram under which Laitram

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agreed to provide us certain accounting, software, manufacturing, and maintenance services. Manufacturing services consist primarily of machining of parts for our marine positioning systems. The term of this agreement expired in September 2001 but we continue to operate under its terms. In addition, when we have requested, the legal staff of Laitram has advised us on certain intellectual property matters with regard to our marine positioning systems. Under a lease of commercial property dated February 1, 2006, between Lapeyre Properties L.L.C. (an affiliate of Laitram) and ION, we agreed to lease certain office and warehouse space from Lapeyre Properties until January 2011. During 2009, we paid Laitram a total of approximately \$4.0 million, which consisted of approximately \$3.2 million for manufacturing services, \$0.7 million for rent and other pass-through third party facilities charges, and \$0.1 million for other services. For the 2008 and 2007 fiscal years, we paid Laitram a total of approximately \$4.3 million and \$4.9 million for these services. In the opinion of our management, the terms of these services are fair and reasonable and as favorable to us as those that could have been obtained from unrelated third parties at the time of their performance.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not participate in transactions that generate material relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities (SPEs) that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As a result, we have no material off-balance sheet arrangements.

Indemnification

In the ordinary course of our business, we enter into contractual arrangements with our customers, suppliers, and other parties under which we may agree to indemnify the other party to such arrangement from certain losses it incurs relating to our products or services or for losses arising from certain events as defined within the particular contract. Some of these indemnification obligations may not be subject to maximum loss limitations. Historically, payments we have made related to these indemnification obligations have been immaterial.

Item 9A. *Controls and Procedures*

(a) *Evaluation of Disclosure Controls and Procedures.* Disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file with or submit to the SEC under the Exchange Act is recorded, processed, summarized and reported within the time period specified by the SEC s rules and forms. Disclosure controls and procedures, include, without limitation, controls and procedures designed to ensure that information required to be disclosed under the Exchange Act is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2009. Based upon that evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2009.

(b) *Management s Report on Internal Control Over Financial Reporting*. Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

(i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of our management and directors; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we assessed the effectiveness of our internal control over financial reporting as of December 31, 2009 based upon criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based upon their assessment, management concluded that the internal control over financial reporting was effective as of December 31, 2009.

The independent registered public accounting firm that has also audited the Company s consolidated financial statements included in the Annual Report on Form 10-K has issued an audit report on our internal control over financial reporting. This report appears below.

Remediation of Material Weakness in Internal Control over Financial Reporting. Under Rule 12b-2 under the Exchange Act, a material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company s annual or interim financial statements will not be prevented or detected on a timely basis. In October 2009, a material weakness was identified in the design and operation of controls surrounding revenue recognition, which resulted in a restatement to our condensed consolidated financial statements as of and for the three and six months ended June 30, 2009. This revenue recognition error resulted from the fact that the sales records in the possession of our management at June 30, 2009 did not contain all relevant documentation relating to the sale of our FireFly land seismic data acquisition system and related hardware and components in China. The discovery of the existence of the additional documentation relating to the sale in question occurred during the course of due diligence procedures that had been performed in connection with our proposed joint venture and related transactions with BGP. In connection with this due diligence process, our employees discovered certain documentation irregularities regarding the sale of the FireFly system, including that a portion of the documentation reflecting the terms for the sale had not been made available to our management for assessment with respect to the recording and reporting of the sale.

As a result, we implemented the following procedures to remediate this material weakness:

- We implemented a quarterly certification requiring our global sales force to confirm that all documentation related to sales transactions have been provided to Company management.

- Global sales personnel (including China) no longer have the authority to enter into sales contracts without the review and approval of designated corporate management; and

- We provided further training and education on the Company s revenue recognition policies and procedures and will continue to provide this training on an annual basis to our global sales force.

Because of significant efforts expended to remediate the material weaknesses described above, management believes that, as of December 31, 2009, the material weakness that existed as of June 30, 2009 had been fully remediated.

(c) *Changes in Internal Control*. Other than as described above, there was not any change in our internal control over financial reporting that occurred during the fourth quarter of fiscal 2009 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

We believe that the actions taken to remediate these weaknesses and the resulting improvement in controls have strengthened our disclosure controls and procedures, as well as our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of ION Geophysical Corporation and Subsidiaries

We have audited ION Geophysical Corporation and subsidiaries internal control over financial reporting as of December 31, 2009, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). ION Geophysical Corporation and subsidiaries management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on ION Geophysical Corporation and subsidiaries internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, ION Geophysical Corporation and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on the COSO criteria**.**

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of ION Geophysical Corporation and subsidiaries as of December 31, 2009 and 2008 and the related consolidated statements of operations, cash flows, stockholders equity and comprehensive income (loss) for each of the three years in the period ended December 31, 2009 of ION Geophysical Corporation and subsidiaries and our report dated March 1, 2010 expressed an unqualified opinion thereon.

/s/ Ernst and Young LLP

Houston, Texas

March 1, 2010

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PART III

Item 11. ***Executive Compensation***

Compensation Committee Interlocks and Insider Participation

The members of the Compensation Committee of our board of directors are Franklin Myers (Chairman), James M. Lapeyre, Jr., John N. Seitz and Nicholas G. Vlahakis. No member of the Committee is, or was during 2009, an officer or employee of ION. Mr. Lapeyre is President and Chief Executive Officer and a significant equity owner of Laitram, L.L.C, which has had a business relationship with ION since 1999 that continued into 2009. During 2009, we paid Laitram and its affiliates a total of approximately $4.0 million, which consisted of approximately $3.2 million for manufacturing services, $700,000 for rent and other pass-through third party facilities charges, and $100,000 for other services. See Certain Transactions and Relationships below.

During 2009:

- No executive officer of ION served as a member of the compensation committee of another entity, one of whose executive officers served on the Compensation Committee of ION;

- No executive officer of ION served as a director of another entity, one of whose executive officers served on the Compensation Committee of ION; and

- No executive officer of ION served as a member of the compensation committee of another entity, one of whose executive officers served as a director of ION.

EXECUTIVE COMPENSATION

Introductory note: The following discussion of executive compensation contains descriptions of various employee benefit plans and employment-related agreements. These descriptions are qualified in their entirety by reference to the full text or detailed descriptions of the plans and agreements, which are filed or incorporated by reference as exhibits to our annual report on Form 10-K for the year ended December 31, 2009. In this discussion, the terms ION, we, our and us refer to ION Geophysical Corporation and its consolidated subsidiaries, except where the context otherwise requires or as otherwise indicated.

Compensation Discussion and Analysis

This Compensation Discussion and Analysis provides an overview of the Compensation Committee of our Board of Directors, a discussion of the background and objectives of our compensation programs for our senior executives, and a discussion of all material elements of the compensation of each of the executive officers identified in the following table, whom we refer to as our named executive officers:

Name	Title
Robert P. Peebler	Chief Executive Officer and Director (our principal executive officer)
James R. Hollis	President and Chief Operating Officer (Mr. Hollis employment with ION ended on January 29, 2010)
R. Brian Hanson	Executive Vice President and Chief Financial Officer (our principal financial officer)
Christopher M. Friedemann	Senior Vice President, Corporate Marketing
David L. Roland	Senior Vice President, General Counsel and Corporate Secretary

Introduction/Corporate Governance

Compensation Committee

The Compensation Committee of our Board of Directors reviews and approves, or recommends to the Board for approval, all salary and other remuneration for our executive officers and oversees matters relating to our employee compensation and benefit programs. The Committee is composed of the following directors:

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Franklin Myers, Chairman
James M. Lapeyre, Jr.
John N. Seitz
Nicholas G. Vlahakis

No member of the Committee is an employee of ION. The Board of Directors has determined that each member of the Committee satisfies the definition of independent as established in the NYSE corporate governance listing standards.

The Committee operates pursuant to a written charter that sets forth its functions and responsibilities. A copy of the charter can be viewed on our website at *http://www.iongeo.com/content/released/comp___committee_charterionfeb_2008.pdf*. The Chairman of the Committee is in charge of the Committee s meeting agendas and, with the assistance of our Corporate Secretary, establishes the Committee s meetings and calendar. For a description of the responsibilities of the Compensation Committee, see *Item 1. Election of Directors Committees of the Board Compensation Committee* above.

Compensation Consultants

Each year from 2005 to 2008, the Compensation Committee has retained Towers Perrin as its independent compensation advisor to advise the Committee on our compensation practices and to assist in developing and implementing our executive compensation program and philosophy. Towers Perrin evaluated our long-term incentive strategy and our stock plans, analyzed our outstanding stock options, restricted stock and other stock-based awards, and provided the Committee with recommendations on our overall long-term incentive strategy and the number of shares to propose to add to our stock plans for future grants to employees and directors, which the Committee and the Board of Directors later approved. In addition, the firm provided the Committee with a summary of changes to disclosure requirements related to executive officer and director compensation. At the request of the Committee, the firm also performed an analysis of competitive compensation levels for our Chief Executive Officer. During 2008, the Governance Committee of our Board retained Hewitt Associates to perform an analysis of prevailing industry compensation levels for our directors. During the first half of 2009, the Compensation Committee engaged Performensation Consulting, an equity compensation consultant, to assist the company and the Compensation Committee in designing a proposed new employee stock purchase plan and a program to permit our current employees to exchange outstanding stock options having exercise prices substantially above the current market price of our common stock, and receive shares of our common stock (the Replenishment Program). During the first quarter of 2010, the Compensation Committee engaged ISS Corporate Services, Inc., a wholly-owned subsidiary of RiskMetrics Group, Inc., to provide the company with benchmarking and modeling services related to its proposals to (i) amend ION s 2004 Long-Term Incentive Plan to increase the total number of shares of ION s common stock available for issuance under the plan, and (ii) approve the Purchase Plan.

During 2008 and 2009, none of Towers Perrin, Hewitt Associates, Performensation Consulting or ISS advised our company or our executive officers on matters outside of these engagements by the Board or its committees.

Role of Management in Establishing and Awarding Compensation

On an annual basis, our Chief Executive Officer, with the assistance of our Human Resources department, recommends to the Compensation Committee any proposed increases in base salary, bonus payments and equity awards for our executive officers other than himself. No executive officer is involved in determining his own salary increase, bonus payment or equity award. When making officer compensation recommendations, our Chief Executive Officer takes into consideration compensation benchmarks, which include industry standards for similar sized organizations serving similar markets, as well as comparable positions, the level of inherent importance and risk associated with the position and function, and the executive s job performance over the previous year. See *Objectives of Our Executive Compensation Programs Benchmarking* and *Elements of Compensation Base Salary* below.

Our Chief Executive Officer, with the assistance of our Human Resources department and input from our executive officers and other members of senior management, also formulates and proposes to the Compensation Committee an employee bonus incentive plan for the ensuing year. For a description of our process for formulating the employee bonus incentive plan and the factors that we consider, see *Elements of Compensation Annual Incentive Compensation* below.

The Committee reviews and approves all compensation and awards to executive officers and all bonus incentive plans. With respect to equity compensation awarded to employees other than executive officers, the Compensation Committee reviews and approves all grants of restricted stock and stock options above 5,000 shares, generally based upon the recommendation of the Chief Executive

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Officer, and has delegated option and restricted stock granting authority to the Chief Executive Officer as permitted under Delaware law for grants to non-executive officers of up to 5,000 shares. Our Chief Executive Officer provides a report to the Compensation Committee of all options and restricted stock awarded by him under this delegated authority.

On its own initiative, at least once a year, the Compensation Committee reviews the performance and compensation of our Chief Executive Officer and, following discussions with the Chief Executive Officer and other members of the Board of Directors, establishes his compensation level. Where it deems appropriate, the Compensation Committee will also consider market compensation information from Towers Perrin or other independent sources. See *Objectives of Our Executive Compensation Programs Benchmarking* below.

Certain members of our senior management generally attend most meetings of the Compensation Committee, including our Chief Executive Officer, our Senior Vice President Global Human Resources, and our General Counsel/Corporate Secretary. However, no member of management votes on items before the Compensation Committee. The Compensation Committee and Board of Directors do solicit the views of our Chief Executive Officer on compensation matters, particularly as they relate to the compensation of the other named executive officers and the other members of senior management reporting to the Chief Executive Officer. The Committee often conducts an executive session during each meeting, during which members of management are not present.

Compensation Committee Activity

During 2009, the Compensation Committee met in person or by conference call six times. In two of those meetings, the Committee also met in executive session with no members of management present. In addition to the six meetings mentioned above, the Committee took action by unanimous written consent, as permitted under Delaware law and our Bylaws, two times during 2009, primarily to approve individual non-executive employee grants of restricted stock and stock options. We believe that each of these individual grants made by unanimous written consent of the Committee complied with the applicable grant date requirements under Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic (ASC) 718, Compensation Stock Compensation) (ASC Topic 718).

During 2009 and the first quarter of 2010, the Committee took the following actions:

Reviewed the 2009 and 2010 employee bonus plans submitted by our Chief Executive Officer and approved each plan after making desired revisions.

Considered and approved employee bonus awards payable under our 2008 and 2009 bonus plans and discretionary bonus awards for certain employees in recognition of their performance during 2008 and 2009.

Engaged Hewitt Associates for:

- an analysis of our 2009 long-term incentive strategy, our stock plans and our outstanding stock options, restricted stock and other stock-based awards, and

- a recommendation on our strategy in 2009 with regards to future grants to employees and directors.

Engaged Performensation Consulting to assist in designing a new employee stock purchase plan (which we and the Committee decided not to pursue for 2009 but are pursuing for 2010) and the Replenishment Program (which we and the Committee decided not to pursue).

Approved amendments to our 2004 Long-Term Incentive Plan, as recommended by Towers Perrin in 2010, to increase the number of shares available for grant to employees and directors under the plan and recommended the proposed amendments to our Board to be submitted to our stockholders for approval at our 2010 annual stockholders meeting.

Participated in the Board review of the succession plan for our Chief Executive Officer and other key members of senior management.

Considered and approved annual base salary increases for individual executive officers and the overall percentage of annual base salary increase applicable to our employees as a whole.

Considered and approved annual employee stock option and restricted stock awards, including awards for individual executive officers.

Approved grants of restricted stock, stock options, restricted stock units and stock appreciation rights to various employees.

Considered and approved, subject to stockholder approval, the Replenishment Program, which would have permitted certain of our current employees to exchange certain outstanding stock options having exercise prices substantially above the current market price of our common stock, and receive shares of our common stock. After obtaining shareholder approval for the Replenishment Program, we decided not to pursue the program.

Reviewed and discussed with management this Compensation Discussion and Analysis.

Engaged ISS Corporate Services, Inc., a wholly-owned subsidiary of RiskMetrics Group, Inc., to provide benchmarking and modeling services related to the company s proposals to amend the 2004 Long-Term Incentive Plan to increase the total number of shares of ION s common stock available for issuance under the plan and approve the Purchase Plan.

Objectives of Our Executive Compensation Programs

General Compensation Philosophy and Policy

Through our compensation programs, we seek to achieve the following general goals:

attract and retain qualified and productive executive officers and key employees by providing total compensation competitive with that of other executives and key employees employed by companies of similar size, complexity and industry of business;

encourage our executives and key employees to achieve strong financial and operational performance;

offer performance-based compensation to create meaningful links between corporate performance, individual performance and financial rewards;

align the interests of our executives with those of our stockholders by providing a significant portion of total pay in the form of stock-based incentives;

encourage long-term commitment to our company; and

limit corporate perquisites to seek to avoid perceptions both within and outside of our company of soft compensation.

Our governing principles in establishing executive compensation have been:

Long-Term and At-Risk Focus. Premium compensation opportunities should be composed of long-term, at-risk pay to focus our management on the long-term interests of our company. Base salary, annual incentives and employee benefits should be at competitive levels when compared to similarly-situated companies.

Equity Orientation. Equity-based plans should comprise a major part of the at-risk portion of total compensation to instill ownership thinking and to link compensation to corporate performance and stockholder interests.

Competitive. We emphasize total compensation opportunities consistent on average with our peer group of companies. Competitiveness of annual base pay and annual incentives is independent of stock performance. However, overall competitiveness of total compensation is generally contingent on long-term, stock-based compensation programs.

Focus on Total Compensation. In making decisions with respect to any element of an executive officer s compensation, the Committee obtains information on and considers the total compensation that may be awarded to the executive officer, including salary, annual bonus and long-term incentive compensation. These total compensation reports are prepared by our Human Resources department and present the dollar amount of each component of the named executive officers compensation, including current cash compensation (base salary, past bonus and eligibility for future bonus), equity awards and other compensation. The overall purpose of these total compensation reports is to bring together, in one place, all of the elements of actual and potential compensation of our named executive officers, as well as information about wealth accumulation, so that the Compensation Committee may analyze both the individual elements of compensation (including the compensation mix) as well as the aggregate total amount of actual and projected compensation. In its most recent review of total compensation reports, the Committee determined that annual compensation amounts for our Chief Executive Officer and our other named executive officers remained generally consistent with the Committee s expectations. However, the Committee reserves the right to make changes that it believes are warranted.

In April 2009, the Committee approved and the company implemented an employee base salary reduction program, including reductions to base salaries for the named executive officers, to reduce company operating costs during the recent market downturn resulting from the economic recession and decline in oil and gas prices. As a result of the market downturn, our stock price had declined to historic low levels, resulting in our employees holding stock options with exercise prices that greatly exceeded both the current market price of ION common stock and the average market price of our stock over the prior 12 months. The Committee recognized that these underwater options no longer provided the long-term incentive and retention objectives that they were intended to provide. As a result, the Board and the Committee proposed and recommended that the company s stockholders approve the Replenishment Program, which would permit certain of our current employees to exchange certain outstanding stock options having exercise prices substantially above the current market price of our common stock, and receive shares of our common stock. After obtaining shareholder approval for the Replenishment Program, the Board and the Committee decided not to implement the program. The proposal to approve the Replenishment Program had provided that even if approved by our shareholders, our Board of Directors or Compensation Committee could still decide not to implement the program. The reasons the program was ultimately not implemented were (i) the increase in the market price of our common stock after the date of mailing (in April 2009) of the proxy material for our 2009 annual meeting of shareholders had effectively reduced the number of participants who would have benefited from participating in the program and (ii) the expenditures involved in implementing the program and the compensation charges against our earnings that would result from the program outweighed the projected benefits that the program would provide to our company and our employees.

Internal Pay Equity. Our core compensation philosophy is to pay our executive officers competitive levels of compensation that best reflect their individual responsibilities and contributions to our company, while providing incentives to achieve our business and financial objectives. While comparisons to compensation levels at other companies (discussed below) are helpful in assessing the overall competitiveness of our compensation program, we believe that our executive compensation program also must be internally consistent and equitable in order for our company to achieve our corporate objectives. Each year our Human Resources department reports to the Compensation Committee the total compensation paid to our Chief Executive Officer and all other senior executives, which includes a comparison for internal pay equity purposes. Over time there have been variations in the comparative levels of compensation of executive officers and changes in the overall composition of the management team and the overall accountabilities of the individual executive officers; however, we and the Committee are satisfied that total compensation received by executive officers reflects an appropriate differential for executive compensation.

These principles apply to compensation policies for all of our executive officers and key employees. We do not follow the principles in a mechanistic fashion; rather, we apply experience and judgment in determining the appropriate mix of compensation for each individual. This judgment also involves periodic review of discernible measures to determine the progress each individual is making toward agreed-upon goals and objectives.

Benchmarking

When making compensation decisions, we also look at the compensation of our Chief Executive Officer and other executive officers relative to the compensation paid to similarly-situated executives at companies that we consider to be our industry and market peers a practice often referred to as benchmarking. We believe, however, that a benchmark should be just that a point of reference for measurement but not the determinative factor for our executives compensation. The purpose of the comparison is not to supplant the analyses of internal pay equity, total wealth accumulation and the individual performance of the executive officers that we consider when making compensation decisions. Because the comparative compensation information is just one of the several analytic tools that are used in setting executive compensation, the Compensation Committee has discretion in determining the nature and extent of its use. Further, given the limitations associated with comparative pay information for setting individual executive compensation, including the difficulty of assessing and comparing wealth accumulation through equity gains, the Committee may elect to not use the comparative compensation information at all in the course of making compensation decisions.

At least once each year, generally in or around August, our Human Resources department, under the oversight of the Compensation Committee, reviews data from market surveys, independent consultants and other sources to assess our competitive position with respect to base salary, annual incentives and long-term incentive compensation.

As a result of the negative impact on the company s business caused by the worldwide recession that began in late 2008 and existed throughout 2009, annual increases to employee base salaries were not considered during 2009. When reviewing compensation data in

2008, we utilized data primarily from Radford salary surveys, the Mercer Global Planning Report 2009 and the WorldatWork 2007-2008 Salary Budget Survey. The survey information from these three resources covered a broad range of industries and companies. For example, the WorldatWork Salary Budget Survey covered 2,800 participating organizations. When reviewing compensation data in 2006 with regard to the compensation of our Chief Executive Officer, the Compensation Committee engaged Towers Perrin to perform a marketplace compensation analysis. In the study, the firm presented data to the Committee from the Towers Perrin 2005 Energy Industry Incentive Survey, the Mercer Human Resource Consulting 2005 Energy Compensation Survey and a proxy compensation analysis for the Chief Executive Officer position among a group of ten industry peer companies. These industry peer companies were:

Global Industries Ltd.	OYO Geospace Corp.
Horizon Offshore Inc.	TETRA Technologies Inc.
Cal Dive International Inc.	Veritas DGC Inc.
Intergraph Corp.	Grant Prideco Inc.
Oceaneering International Inc.	Oil States International Inc.

When determining compensation for Mr. Hollis when he was promoted to President and Chief Operating Officer in December 2008, we utilized data primarily from the Oilfield Manufacturing & Services Industry (OFMS) Executive Survey and executive surveys from Radford, Mercer and Towers Perrin. The OFMS survey compiles survey results and/or proxy compensation data from the following oilfield services companies:

Baker Hughes Incorporated	Hydril Company LP
Bristow Group Inc.	ION Geophysical Corporation
Complete Production Services, Inc.	National Oilwell Varco, Inc.
Cameron International Corporation	Newpark Resources, Inc.
Core Laboratories	Oil States International Inc.
ENSCO, Inc.	Pride International, Inc.
FMC Technologies, Inc.	Rowan Companies, Inc.
GlobalSantaFe (now Transocean Inc.)	Smith International, Inc.
Gulfmark Offshore, Inc.	TIW Corporation
Halliburton Company	VetcoGray
Hanover Compressor (now Exterran)	Warren Equipment Company

The overall results of the Towers Perrin analysis (with regard to Chief Executive Officer compensation) and the consulting firm surveys (with regard to compensation for all other levels within our company) provide the starting point for our compensation analysis. We believe that the surveys and the Towers Perrin analysis contain relevant compensation information from companies that are representative of the sector in which we operate, have relative size as measured by market capitalization, and experience relative complexity in the business and the executives roles and responsibilities.

Beyond the report and survey numbers, we look extensively at a number of other factors, including our estimates of the compensation at our most comparable competitors and other companies that were closest to our company in size, profitability and complexity. We also consider an individual s current performance, the level of corporate responsibility, and the employee s skills and experience, collectively, in making compensation decisions.

In the case of our Chief Executive Officer and some of our other executive officers, we also consider our company s performance during the person s tenure, and the anticipated level of difficulty of replacing the person with someone of comparable experience and skill. When we hired R. Brian Hanson as our new Executive Vice President/Chief Financial Officer in May 2006, for example, we based our total compensation ranges for the position primarily on our direct experience and observations regarding competitive compensation packages for candidates possessing requisite levels of senior executive-level financial management experience, expertise and achievement.

In addition to our periodic review of compensation, we also regularly monitor market conditions and will adjust compensation levels from time to time as necessary to remain competitive and retain our most valuable employees. When we experience a significant level of competition for retaining current employees or hiring new employees, we will typically reevaluate our compensation levels within that employee group in order to ensure our competitiveness.

Elements of Compensation

The primary components of our compensation are:

- base salary;
- performance-based annual incentive compensation; and
- long-term equity-based incentive compensation, such as stock options, restricted stock, restricted stock units and stock appreciation rights.

Below is a summary of each component:

Base Salary

General. The general purpose of base salary for our executive officers is to create a base of cash compensation for the officer that is consistent on average with the range of base salaries for executives in similar positions and with similar responsibilities at comparable companies. In addition to salary norms for persons in comparable positions at comparable companies, base salary amounts may also reflect the nature and scope of responsibility of the position, the expertise of the individual employee and the competitiveness of the market for the employee s services. Base salaries of executives other than our Chief Executive Officer may also reflect our Chief Executive Officer s evaluation of the individual executive officer s job performance. As a result, the base salary level for each individual may be above or below the target market value for the position. The Compensation Committee also recognizes that the Chief Executive Officer s compensation should reflect the greater policy- and decision-making authority that he holds and the higher level of responsibility he has with respect to our strategic direction and our financial and operating results. At December 31, 2009, our Chief Executive Officer s annual base salary was 33% higher than the annual base salary for the next highest-paid executive officer. In addition, minimum base salaries for certain of our executive officers are determined by employment agreements with these officers.

Base salary is designed to provide an income level that is comparable to the income of executives in similar positions and with similar responsibilities at comparable companies. The base salaries for our executives reflect levels that we have concluded were appropriate based upon our general experience and market data. We do not intend for base salaries to be the vehicle for long-term capital and value accumulation for our executives.

2008 and 2009 Actions. In typical years, base salaries are reviewed at least annually and may also be adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities and changes in responsibilities, performance and contribution to ION, experience, impact on total compensation, relationship of compensation to other ION officers and employees, and changes in market levels. Salary increases for executive officers do not follow a preset schedule or formula but do take into account changes in the market and individual circumstances. In 2008, base salary levels were reviewed and adjusted during August and September.

Commencing in late 2008, our business experienced a significant decline, due in large part to the global recession and the decline in oil and gas prices, as well as other factors that have negatively impacted demand for our products and services and thus adversely affected our financial results. We took a number of actions to reduce costs in our businesses and seek to improve our operating performance. In late 2008 we decided to defer any future base salary increases for employees until at least 2010. Then, in April 2009, we implemented a base salary reduction program in a further effort to reduce our operating costs. Under the salary reduction program, base salaries for employees were reduced by certain percentages ranging from a 12% reduction in base salary for our Chief Executive Officer, Chief Financial Officer and Chief Operating Officer, a 10% reduction for other executives and management and a 5% reduction for most other employees. The program remained in effect until October 2009, when management and the Board determined that developments and outlook for our business had improved to the extent that the program should end.

Below is a summary of actions taken during 2008 and 2009 with respect to base salaries of our named executive officers:

Named Executive Officer	Action
Robert P. Peebler	During 2008, CEO compensation surveys from Radford and Towers Perrin indicated that the 50th percentile for CEO base salary for the companies with revenues less than $1 billion included in these surveys was an average of $620,000. Based on the results of the reports, and in recognition of our performance to date and Mr. Peebler s unique experience, expertise, and capabilities, in September 2008 the Compensation Committee increased Mr. Peebler s annual base salary from $525,000 to $575,000. Under the base salary reduction program in effect from April 2009 to October 2009, Mr. Peebler s annual base salary was reduced from $575,000 to $506,000.
James R. Hollis	During 2008, COO compensation surveys from Radford and Towers Perrin indicated that the 50th percentile for COO base salary for the companies with revenues less than $1 billion included in these surveys was $332,550. Based on the results of the reports, in September 2008 the Compensation Committee increased Mr. Hollis annual base salary as the Executive Vice President and COO of ION Solutions from $300,000 to $327,000. In December 2008, in connection with Mr. Hollis promotion to President and COO of our company, the Compensation Committee reviewed President/COO compensation data from Towers Perrin, Radford, the OFMS Executive Survey and Mercer indicating that the 50th percentile for President/COO base salary for the companies included in these surveys was $385,642, and increased Mr. Hollis annual base salary from $327,000 to $385,000. Under the base salary reduction program in effect from April 2009 to October 2009, Mr. Hollis annual base salary was reduced from $385,000 to $338,800.
R. Brian Hanson	During 2008, CFO compensation surveys from Radford indicated that the 50th percentile for CFO base salary for the companies with revenues less than $1 billion included in these surveys was $335,076. Based on the results of the reports, in September 2008 the Compensation Committee increased Mr. Hanson s annual base salary from $300,000 to $327,000. Under the base salary reduction program in effect from April 2009 to October 2009, Mr. Hanson s annual base salary was reduced from $327,000 to $287,760.
Christopher M. Friedemann	During 2008, compensation surveys from Radford and Towers Perrin indicated that the 50th percentile for senior marketing executive base salary for the companies with revenues less than $1 billion included in these surveys was $230,500. Based on the results of the reports and in recognition of Mr. Friedemann s performance, expertise, and capabilities, in September 2008 the Compensation Committee increased Mr. Friedemann s annual base salary from $245,000 to $262,150. Under the base salary reduction program in effect from April 2009 to October 2009, Mr. Friedemann s annual base salary was reduced from $262,150 to $235,935.
David L. Roland	During 2008, compensation surveys from Radford and Towers Perrin indicated that the 50th percentile for top legal/executive base salary for the companies with

revenues less than $1 billion included in these surveys averaged $282,668. Based on the results of the reports and in recognition of Mr. Roland s performance, expertise, and capabilities, in September 2008 the Compensation Committee increased Mr. Roland s annual base salary from $250,000 to $270,000. Under the base salary reduction program in effect from April 2009 to October 2009, Mr. Roland s annual base salary was reduced from $270,000 to $243,000.

Annual Incentive Compensation

Our employee annual bonus incentive plan is intended to promote the achievement each year of company performance objectives and performance objectives of the employee s particular business unit, and to recognize those employees who contributed to the company s achievements. The plan provides cash compensation that is at-risk on an annual basis and is contingent on achievement of annual business and operating objectives and individual performance. The plan provides all participating employees the opportunity to share in the company s performance through the achievement of established financial and individual objectives. The financial and individual objectives within the plan are intended to measure an increase in the value of our company and, in turn, our stock.

In recent years, we have adopted an annual incentive plan with regard to each year. Performance under the annual incentive plan is measured with respect to the designated plan fiscal year. Payments under the plan are paid in cash in an amount reviewed and approved by the Compensation Committee and are ordinarily made in a single installment in the first quarter following the completion of a fiscal year, after the financial results for that year have been determined.

Our annual incentive plan is usually consistent with our operating plan for the same year. In late 2008, we prepared a consolidated company operating budget for 2009 and individual operating budgets for each operating unit. The budgets took into consideration market opportunities, customer and sale opportunities, technology enhancements for new products, product manufacturing and delivery schedules and other operating factors. The Board of Directors analyzed the proposed budgets with management extensively and, after analysis and consideration, the Board approved the consolidated 2009 operating plan. In early 2009, the Board approved several subsequent changes in the 2009 operating plan to reflect the rapidly declining global market conditions and global financial markets that existed during late 2008 and throughout 2009. During late 2008 and early 2009, our Chief Executive Officer worked with our Human Resources department and members of senior management to formulate our 2009 incentive plan, consistent with the 2009 operating plans approved by the Board.

At the beginning of 2009, the Compensation Committee approved our 2009 annual incentive plan for executives and designated non-executive key employees. The computation of awards generated under the plan is required to be approved by the Committee. In February 2010, the Committee reviewed the company s actual performance against each of the plan performance goals established at the beginning of the year and evaluated each individual s performance during the preceding year. The results of operations of the company for that year and individual performance evaluations determined the appropriate payout under the annual incentive plan.

The Compensation Committee has discretion in circumstances it determines are appropriate to authorize discretionary incentive compensation awards that might exceed amounts that would otherwise be payable under the terms of the incentive plan. These discretionary awards can be payable in cash, stock options, restricted stock, restricted stock units, stock appreciation rights or a combination thereof. Any stock options, restricted stock or restricted stock units awarded would be granted under one of our existing long-term equity incentive plans. Any stock appreciation rights awarded would be granted under our Stock Appreciation Rights Plan. The Committee also has the discretion, in appropriate circumstances, to grant a lesser incentive award, or no incentive award at all, under the incentive plan. The Committee intends to review our annual incentive compensation program annually to ensure that the key elements of the program continue to meet the objectives described above.

Below is a general description of our 2009 incentive plan and a general summary of the company performance criteria applicable to the plan, as well as our variable payment plan we adopted in 2009.

2009 Incentive Plan

The purpose of the 2009 incentive plan was to:

- provide an incentive for our participating employees to achieve their highest level of individual and team performance in order to accomplish our company s 2009 strategic and financial goals, and
- reward the employees for those achievements and accomplishments.

Designated employees, including our named executive officers, were eligible to participate in our 2009 incentive plan. The 2009 incentive plan was designed to equate the size of the incentive award to the performance of the individual participant and the performance of our company as a whole. Every participating named executive officer had the opportunity to earn an incentive payment based on their performance against criteria as defined by our Chief Executive Officer, and achievement of our company s performance against designated consolidated financial objectives. Award determinations for the named executive officers under the plan were also based on evaluations of employee performance by our Chief Executive Officer. Under the 2009 incentive plan, 25% of the funds allocated for distribution were available to award to eligible employees regardless of the company s 2009 financial performance, and 75% of the funds were available for distribution to eligible employees only to the extent the company satisfied the designated 2009 financial performance criteria. As a result, the amount of total dollars available for distribution under the incentive plan was largely dependent on the company s achievement of the pre-defined financial objectives.

As reported in the chart below, our 2009 incentive plan established a 2009 target consolidated Adjusted EBITDA (net income before net interest expense, taxes, depreciation and amortization and other factors) performance goal. Prior to approval of the 2009 incentive plan, management and the Committee concluded that, in the depressed industry and economic environment prevalent in late 2008 and throughout 2009, it was important for the company to encourage achievement of cash flow and Adjusted EBITDA. As a result, the Committee approved performance criteria based on Adjusted EBITDA for 2009 bonus awards to the named executive officers and other covered employees under our 2009 incentive plan. Under the plan, every participating named executive officer other than our Chief Executive Officer had the opportunity to earn up to 100% of his or her base salary depending on performance of our company against the designated performance goal and performance of the executive against personal criteria determined at the beginning of 2009 by our Chief Executive Officer. Under separate terms approved by the Compensation Committee and contained in his employment agreement, our Chief Executive Officer participated in the plan with potential to earn a target incentive payment of 75% of his base salary, depending on achievement of the company s target consolidated performance goal and pre-designated personal critical success factors, and a maximum of 150% of his base salary upon achievement of the maximum consolidated performance goal and the personal critical success factors.

Performance Criteria. In 2009, the Compensation Committee approved the following corporate consolidated Adjusted EBITDA performance criteria for consideration of bonus awards to the named executive officers and other covered employees under the 2009 incentive plan (the calculation of Adjusted EBITDA excluded one-time and special non-operating charges):

Threshold Adjusted EBITDA	Target Adjusted EBITDA	Maximum Adjusted EBITDA
$113.9 million	$142.4 million	$190.8 million

Where an employee is primarily involved in a particular business unit, the financial performance criteria under our incentive plan are heavily weighted toward the operational performance of the employee s business unit rather than consolidated company performance. All of our named executive officers have broader corporate responsibility; as a result, their performance goals are heavily weighted toward the consolidated performance of the company as a whole.

During 2009, on a consolidated basis, excluding the impact of certain special non-recurring items, we achieved consolidated Adjusted EBITDA of $72.2 million. Because on a consolidated basis we did not achieve our threshold or target financial objectives in 2009, the named executive officers and many other eligible executives and employees generally received either no bonus payments, or only reduced bonus payments, pursuant to the incentive plan. In cases where the Committee decided to award discretionary bonus payments for 2009, the Committee took into consideration our company s overall performance and the leadership and personal commitment exhibited by the company s management team against one of the worst national and global economic downturns in the post-war era. The Committee took into consideration not only the company s ability to weather the downturn effectively but to make changes and accomplish initiatives critical to positioning the company for future long-term growth.

For example, when considering the bonus payment for Mr. Peebler, among the factors the Committee took into consideration was Mr. Peebler s leadership in our company s successful negotiation and completion of our joint venture with BGP to design, develop, manufacture and sell land-based seismic data acquisition equipment for the petroleum industry. When considering the bonus payment for Mr. Hanson, among the factors the Committee took into consideration was Mr. Hanson s critical involvement in the completion of the BGP joint venture and Mr. Hanson s leadership in completing several key finance transactions during 2009, including the completion of a refinancing of most of the Company s debt in connection with the completion of the BGP joint venture. When considering the bonus payment for Mr. Roland, among the factors the Committee took into consideration was Mr. Roland s involvement in the completion of the BGP joint venture and Mr. Roland s leadership in securing several major litigation judgments that our company had pursued against certain of our competitors. When considering the bonus payment for Mr. Friedemann, among the factors the Committee took into consideration was Mr. Friedemann s involvement in the completion of the BGP joint venture and the initial marketing efforts related to the joint venture.

Our 2009 Summary Compensation Table below reflects the payments that our named executive officers received under our 2009 incentive plan. Because the company s data processing business unit exceeded its 2009 financial objectives under the plan, employees primarily involved in that business unit generally received larger bonus payments than employees in other business units.

In April 2010, the Compensation Committee approved our 2010 annual incentive plan. The general structure of our 2010 annual incentive plan is similar to our 2009 incentive plan but will focus on achievement of operating income rather than Adjusted EBITDA. The particular performance goals designated under our 2010 plan reflect our confidential strategic plans, and cannot be disclosed at this time because it would provide our competitors with confidential information regarding our market and segment outlook and strategies. We are currently unable to determine how difficult it will be for our company to meet the designated performance goals under our 2010 plan. Generally, the Committee attempts to establish the threshold, target and maximum levels such that the relative difficulty of achieving each level is approximately consistent from year to year.

2009 Variable Payment Plan

As described above, the global recession and decline in oil and gas prices resulted in a significant decline in our business during late 2008 and through 2009 and, as a result, in April 2009 we implemented a base salary reduction program in an effort to reduce our operating costs. Under the salary reduction program, base salaries for most employees were reduced by certain percentages, depending on the level of the employee. The salary reduction program remained in effect until October 2009, when management and the Board determined that our financial prospects warranted the end of the program.

In April 2009, the Compensation Committee approved the 2009 Variable Payment Plan (the Variable Plan). All persons who were employed, either full-time or part-time, by us on the Variable Plan effective date were eligible to participate in the plan, including all executive officers. Under the Variable Plan, upon our company achieving a predetermined level of consolidated Adjusted EBITDA (net income before net interest expense, taxes, depreciation and amortization and other factors) during 2009 and management and the Compensation Committee s determination that the company has sufficient levels of liquidity to make the plan payments, participating employees could receive a plan payment equal to an amount of up to 110% of the aggregate sum resulting from subtracting (a) the respective employee s reduced base salary amount per pay period received by the employee during the period from the Variable Plan s effective date to December 31, 2009, from (b) the employee s base salary amount per pay period immediately before the Variable Plan s effective date. If an eligible participating employee did not receive a full 110% payment under the Variable Plan, the employee would receive a supplemental allotment of extra vacation days equal in value to the plan shortfall. The company did not achieve the predetermined level of consolidated Adjusted EBITDA during 2009 under the Variable Plan, so eligible participating employees will not receive a payment under the plan and instead will receive a supplemental allotment of extra vacation days in accordance with the plan. The Variable Plan was in effect only with regard to 2009 and will not remain in effect for 2010 or any other years.

Long-Term Stock-Based Incentive Compensation

We have structured our long-term incentive compensation to provide for an appropriate balance between rewarding performance and encouraging employee retention and stock ownership. There is no pre-established policy or target for the allocation between either cash or non-cash or short-term and long-term incentive compensation; however, long-term incentives comprise a large portion of the total compensation package for executive officers and key employees. As reflected in our 2009 Summary Compensation Table below, the long-term incentives received by each of our named executive officers as a percentage of their respective total compensation during 2009 were as follows: Mr. Peebler 48%; Mr. Hanson 53%; Mr. Hollis 30%; Mr. Friedemann 27% and Mr. Roland 46%.

For 2009, there were three forms of long-term incentives utilized for executive officers and key employees: stock options, restricted stock, and restricted stock units. For 2010, we have again recommended that stock options, restricted stock and restricted stock units be the only forms of long-term equity-based incentives to be utilized for executive officers and key employees. Our long-term incentive plans have provided the principal method for our executive officers to acquire equity or equity-linked interests in our company.

Of the total stock option or restricted stock employee awards made by ION during 2009, 59% were in the form of stock options and 41% were in the form of restricted stock or restricted stock units.

Stock Options. Under our equity plans, stock options may be granted having exercise prices equal to either the closing price of our stock on the date before the date of grant or the average of the high and low sale prices of our stock on the date of grant, depending on the terms of the particular stock option plan that governs the award. In any event, all awards of stock options are made at or above the market price at the time of the award. The Compensation Committee will not grant stock options having exercise prices below the market price of our stock on the date of grant, and will not reduce the exercise price of stock options (except in connection with adjustments to reflect recapitalizations, stock or extraordinary dividends, stock splits, mergers, spin-offs and similar events, as required by the relevant plan) without the consent of our stockholders. Our stock options generally vest ratably over four years, based on continued employment. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including voting rights and the right to receive dividends or dividend equivalents. New option grants normally have a term of ten years.

The purpose of stock options is to provide equity compensation with value that has been traditionally treated as entirely at-risk, based on the increase in our stock price and the creation of stockholder value. Stock options also allow our executive officers and key employees to have equity ownership and to share in the appreciation of the value of our stock, thereby aligning their compensation directly with increases in stockholder value. Stock options only have value to their holder if the stock price appreciates in value from the date options are granted.

Stock option award decisions are generally based on past business and individual performance. In determining the number of options to be awarded, we also consider the grant recipient s qualitative and quantitative performance, the size of stock option and other stock based awards in the past, and expectations of the grant recipient s future performance. In 2009, a total of 81 employees received option awards, covering 635,750 shares of common stock. In 2009, the named executive officers received option awards for a total of 40,000 shares, or approximately 6% of the total options awarded in 2009.

Restricted Stock and Restricted Stock Units. We use restricted stock and restricted stock units to focus executives on our long-term performance and to help align their compensation more directly with stockholder value. Vesting of restricted stock and restricted stock units typically occurs ratably over three years, based solely on continued employment of the recipient-employee. In 2009, 84 employees received restricted stock or restricted stock unit awards, covering an aggregate of 438,874 shares of restricted stock and shares underlying restricted stock units. The named executive officers received awards totaling 281,424 shares of restricted stock in 2009, or approximately 64% of the total shares of restricted stock awarded in 2009.

Awards of restricted stock units have been made to certain of our foreign employees in lieu of awards of restricted stock. Restricted stock units provide certain tax benefits to our foreign employees as the result of foreign law considerations, so we expect to continue to award restricted stock units to certain foreign employees for the foreseeable future.

Stock Appreciation Rights. In 2008, we awarded cash-settled stock appreciation rights to Mr. Hollis and Mr. Hanson as a special grant in lieu of grants of stock options to provide further emphasis on our long-term performance and to further align their compensation more directly with stockholder value. Vesting of all of the stock appreciation rights awarded to Messrs. Hollis and Hanson occurs after three years, based solely on their continued employment. During 2008, we also awarded stock appreciation rights to our former Executive Vice President & Chief Operating Officer ION Systems who left the company in December 2008, in connection with his severance package and his agreement to provide consulting services to the company after his termination of employment. No stock appreciation rights were awarded in 2009.

The Compensation Committee intends to review both the annual incentive compensation program and the long-term incentive program annually to ensure that their key elements continue to meet the objectives described above.

Approval and Granting Process. As described above, the Compensation Committee reviews and approves all stock option, restricted stock, restricted stock unit and stock appreciation right awards made to executive officers, regardless of amount. With respect to equity compensation awarded to employees other than executive officers, the Committee reviews and approves all grants of restricted stock, stock options and restricted stock units above 5,000 shares, generally based upon the recommendation of our Chief Executive Officer. Committee approval is required for any grant to be made to an executive officer in any amount. The Committee has granted to our Chief Executive Officer the authority to approve grants to any employee other than an executive officer of (i) up to 5,000 shares of restricted stock and (ii) stock options for not more than 5,000 shares. Our Chief Executive Officer is also required to provide a report to the Committee of all awards of options and restricted stock made by him under this authority. We believe that this policy is beneficial because it enables smaller grants to be made more efficiently. This flexibility is particularly important with respect to attracting and hiring new employees, given the increasingly competitive market for talented and experienced technical and other personnel in locales in which our employees work.

All grants of restricted stock, restricted stock units, stock options and stock appreciation rights to employees or directors are granted on one of four designated quarterly grant dates during the year: March 1, June 1, September 1 or December 1. The Compensation Committee approved these four dates because they are not close to any dates that would normally be anticipated to contain earnings announcements or other announcements of material events. For an award to a current employee, the grant date for the award is the first designated quarterly grant date that occurs after approval of the award. For an award to a newly hired employee who is not yet employed by us at the time the award is approved, the grant date for the award is the first designated quarterly grant date that occurs after the new employee commences work. We believe that this process of fixed quarterly grant dates is beneficial because it serves to remove any perception that the grant date for an award could be capable of manipulation or change for the benefit of the recipient. In addition, having all grants occur on a maximum of four days during the year simplifies certain fair value accounting calculations related to the grants, thereby minimizing the administrative burden associated with tracking and calculating the fair values, vesting schedules and tax-related events upon vesting of restricted stock and also lessening the opportunity for inadvertent calculation errors.

With the exception of significant promotions, new hires or unusual circumstances, we generally make most awards of equity compensation on December 1 of each year. This date was selected because (i) it enables us to consider individual performance eleven months into the year, (ii) it simplifies the annual budget process by having the expense resulting from the equity award occur late in the year, (iii) the date is approximately three months before the date that we normally pay any annual incentive bonuses and (iv) generally speaking, December 1 is not close to any dates that would normally be anticipated to contain earnings announcements or other announcements of material events.

We do not have in effect any policies regarding the adjustment or recovery of awards or payments made by us in the event that any relevant performance measures of our company on which the awards or payments may be based, are subsequently restated or otherwise adjusted in a manner that would reduce the size of the award or payment.

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Personal Benefits, Perquisites and Employee Benefits

When analyzing the total compensation received by our Chief Executive Officer and other executives, the Compensation Committee also considers whether the executives should be provided additional compensation in the form of perquisites through the availability of benefits that are convenient for the executives to use when faced with the demands of their positions. Our executives have concluded that most perquisites traditionally offered to executives of similarly-sized companies are unnecessary for our company. As a result, benefits, perquisites and any other similar personal benefits offered to executive officers are substantially the same as those offered to our general salaried employee population. These benefits include access to medical and dental insurance, life insurance, disability insurance, vision plan, charitable gift matching (up to designated limits), 401(k) plan, flexible spending accounts for healthcare and dependent care and other customary employee benefits. We have in the past provided all employees with a company match of certain levels of 401(k) contributions; however, as part of our cost-cutting measures taken as a result of the economic recession and decline in oil and gas prices, in April 2009, we temporarily discontinued the company match for all employees, including executive officers. Business-related relocation benefits are generally reimbursed but are individually negotiated when they occur. We intend to continue applying our general policy of not providing specific personal benefits and perquisites to our executives; however, we may, in our discretion, revise or add to any executive s personal benefits and perquisites if we deem it advisable.

Risk Management Considerations

The Committee believes that our company s performance-based bonus and equity programs create incentives to create long-term shareholder value. The Committee has discussed the concept of risk as it relates to the company s compensation programs, and the Committee has concluded that the company s compensation programs do not encourage excessive or inappropriate risk-taking. Several elements of the compensation programs are designed to promote the creation of long-term value and thereby discourage behavior that leads to excessive risk:

- The compensation programs consist of both fixed and variable compensation. The fixed (or salary) portion is designed to provide a steady income regardless of the company s stock price performance so that executives do not focus exclusively on stock price performance to the detriment of other important business metrics. The variable (cash bonus and equity) portions of compensation are designed to reward both short- and long-term corporate performance. The Committee believes that the variable elements of compensation are a sufficient percentage of overall compensation to motivate executives to produce superior short- and long-term corporate results, while the fixed element is also sufficiently high that the executives are not encouraged to take unnecessary or excessive risks in doing so.

- The financial metrics used to determine the amount of an executive s bonus are measures the Committee believes drive long-term shareholder value and, in today s difficult market environment, ensure the continued viability of the company. Moreover, the Committee attempts to set ranges for these measures that encourage success without encouraging excessive risk taking to achieve short-term results. In addition, the overall maximum bonus for each participating named executive officer other than our Chief Executive Officer is not expected to exceed 100% of the executive s base salary under the bonus plan and the overall bonus for our Chief Executive Officer, under his employment agreement, will not exceed 150% of his base salary under the bonus plan, in each case no matter how much the company s financial performance exceeds the ranges established at the beginning of the year.

- We have strict internal controls over the measurement and calculation of the financial metrics that determine the amount of an executive s bonus, designed to keep it from being susceptible to manipulation by an employee, including our executives.

- Stock options generally become exercisable over a four-year period and remain exercisable for up to ten years from the date of grant, encouraging executives to look to long-term appreciation in equity values.

Restricted stock generally becomes exercisable over a three-year period, again encouraging executives to look to long-term appreciation in equity values.

Senior executives, including our named executive officers, are required to acquire over time and hold shares of our company s stock having a value of between one and four times the executive s annual base salary, depending on the level of the executive. The Committee believes that the stock ownership guidelines provide a considerable incentive for management to consider the company s long-term interests, since a portion of their personal investment portfolio consists of company stock.

We do not permit any of our executive officers or directors to enter into any derivative or hedging transactions on our stock, including short sales, market options, equity swaps and similar instruments, thereby preventing executives from insulating themselves from the effects of poor company stock price performance.

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Indemnification of Directors and Executive Officers

Our Bylaws require us to indemnify our directors and employees (including our executive officers) in connection with any legal action brought against them by reason of the fact that they are or were a director, officer, employee or agent of our company, to the full extent permitted by law. Our Bylaws also provide, however, that no such obligation to indemnify exists as to proceedings initiated by an employee or director against us or our directors unless (a) it is a proceeding (or part thereof) initiated to enforce a right to indemnification or (b) was authorized or consented to by our Board of Directors.

In 2002, we also entered into indemnity agreements with certain of our outside directors that provide for us to indemnify the director in connection with any proceeding in which the director is involved by reason of the fact that the director is or was a director of the company. In order to be indemnified under these agreements, the director must have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the company and, in the case of a criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

As discussed below, we have also entered into employment agreements with certain of our executive officers that provide for us to indemnify the executive to the fullest extent permitted by our Certificate of Incorporation and Bylaws. The agreements also provide that we will provide the executive with coverage under our directors and officers liability insurance policies to the same extent as provided to our other executives.

Stock Ownership Requirements; Hedging Policy

We believe that broad-based stock ownership by our employees (including our executive officers) enhances our ability to deliver superior stockholder returns by increasing the alignment between the interests of our employees and our stockholders. Accordingly, the Board has adopted stock ownership requirements applicable to each of our senior executives, including our named executive officers. The policy requires each executive to retain direct ownership of at least 50% of all shares of our company s stock received upon exercise of stock options and vesting of awards of restricted stock or restricted stock units until the executive owns shares with an aggregate value equal to the following multiples of the executive s annual base salary:

President and Chief Executive Officer	4x
Executive Vice President	2x
Senior Vice President	1x

In recommending these requirements to the Board for adoption, the Governance Committee considered our historical grant practices, historical retention practices for senior executives, and value of current holdings by our senior executives, and concluded that this policy would meet our desired objectives. As of the date of the proxy statement, all of our senior executives were in compliance with the stock ownership requirements.

We do not permit any of our executive officers or directors to enter into any derivative or hedging transactions on our stock, including short sales, market options, equity swaps and similar instruments.

Impact of Regulatory Requirements on Compensation

The financial reporting and income tax consequences to our company of individual compensation elements are important considerations for the Compensation Committee when it is analyzing the overall level of compensation and the mix of compensation among individual elements. Under Section 162(m) of the Internal Revenue Code and the related federal treasury regulations, we may not deduct annual compensation in excess of $1 million paid to certain employees generally our Chief Executive Officer and our four other most highly compensated executive officers unless that compensation qualifies as performance-based compensation. Overall, the Committee seeks to balance its objective of ensuring an effective compensation package for the executive officers with the need to maximize the immediate deductibility of compensation while ensuring an appropriate (and transparent) impact on reported earnings and other closely followed financial measures.

In making its compensation decisions, the Committee has considered the limit of deductibility within the requirements of Internal Revenue Code Section 162(m) and its related Treasury regulations. As a result, the Committee has designed much of the total compensation packages for the executive officers to qualify for the exemption of performance-based compensation from the deductibility limit. However, the Committee does have the discretion to design and use compensation elements that may not be deductible within the limitations under

Section 162(m), if the Committee considers the tax consequences and determines that those elements are in our best interests. To maintain flexibility in compensating executive officers in a manner designed to promote varying corporate goals, we have not adopted a policy that all compensation must be deductible.

Certain payments to our named executive officers under our 2009 annual incentive plan may not qualify as performance-based compensation under Section 162(m) because the awards are calculated and paid in a manner that may not meet the requirements under Section 162(m) and the related Treasury regulations. Given the rapid changes in our business during 2009 and those that we foresee for the remainder of 2010, we believe that we are better served in implementing a plan that provided for adjustments and discretionary elements for our senior executives incentive compensation for 2009 and 2010, rather than ensure that we implement all of the requirements and limitations under Section 162(m) into these incentive plans.

For accounting purposes, we apply the guidance in ASC Topic 718 to record compensation expense for our equity-based compensation grants. ASC Topic 718 is used to develop the assumptions necessary and the model appropriate to value the awards as well as the timing of the expense recognition over the requisite service period, generally the vesting period, of the award.

Executive officers will generally recognize ordinary taxable income from stock option awards when a vested option is exercised. We generally receive a corresponding tax deduction for compensation expense in the year of exercise. The amount included in the executive officer s wages and the amount we may deduct is equal to the common stock price when the stock options are exercised less the exercise price, multiplied by the number of stock options exercised. We do not pay or reimburse any executive officer for any taxes due upon exercise of a stock option. We have not historically issued any tax-qualified incentive stock options under Section 422 of the Internal Revenue Code.

Executives will generally recognize taxable ordinary income with respect to their shares of restricted stock at the time the restrictions lapse (unless the recipient elects to accelerate recognition as of the date of grant). Restricted stock unit awards are generally subject to ordinary income tax at the time of payment or issuance of unrestricted shares of stock. We are generally entitled to a corresponding federal income tax deduction at the same time the executive recognizes ordinary income.

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis included in this Form 10-K/A with management of ION. Based on such review and discussions, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Form 10-K/A.

Franklin Myers, Chairman
James M. Lapeyre, Jr.
John N. Seitz
Nicholas G. Vlahakis

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SUMMARY COMPENSATION TABLE

The following table summarizes the compensation paid to or earned by, during the fiscal year ended December 31, 2009, our named executive officers, which are our Chief Executive Officer, Chief Financial Officer and three other most highly compensated executive officers at December 31, 2009:

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Robert P. Peebler	2009	559,961		582,974		75,000	3,317	1,221,252
Chief Executive	2008	536,539		417,931	349,200	110,000	3,207	1,416,877
Officer and Director	2007	505,769		946,197		500,000	3,423	1,955,389
James R. Hollis	2009	374,931		163,200			3,554	541,685
President and Chief	2008	308,462		60,000	194,000	80,000	6,654	649,116
Operating Officer	2007	279,038		231,450	382,500	135,000	6,643	1,034,631
R. Brian Hanson	2009	318,447		408,000		40,000	2,601	769,048
Executive Vice	2008	306,231		45,000	135,800	80,000	7,750	574,781
President and Chief Financial Officer	2007	288,462		231,450	459,000	210,000	7,750	1,196,662
Christopher M. Friedemann	2009	258,118		54,400	52,485	25,000	2,404	392,407
Senior Vice President, Corporate Marketing	2008	248,958		30,000	77,600	50,000	4,145	410,703
David L. Roland Senior Vice President, General Counsel and Corporate Secretary	2009	265,847		163,200	87,475	30,000	2,492	549,014

Discussion of Summary Compensation Table

Stock Awards Column. All of the amounts in the Stock Awards column reflect the grant-date fair value of awards of restricted stock during the fiscal year (excluding any impact of assumed forfeiture rates) under our 2000 Restricted Stock Plan, 2004 Long-Term Incentive Plan, and April 2005 Inducement Equity Program. While unvested, a holder of restricted stock is entitled to the same voting and dividend rights as all other holders of common stock. In each case, unless stated otherwise below, the awards of shares of restricted stock vest in one-third increments each year, over a three-year period. In addition to the grants and awards in 2009 described in the *2009 Grants of Plan-Based Awards* table below:

Pursuant to his employment agreement, Mr. Peebler received:

- an award of 32,560 shares of restricted stock on March 1, 2007, which is equal to $435,000 (the amount of cash incentive plan compensation that Mr. Peebler earned for fiscal 2006) divided by $13.36, which was the average of the closing sales price per share on the NYSE of our shares of common stock for the last ten business days of 2006. The shares of restricted stock vested on March 1, 2009.

- an award of 37,425 shares of restricted stock on March 1, 2007, which is equal to the amount of Mr. Peebler s annual base salary as of March 1, 2007, divided by $13.36. The shares of restricted stock vested on March 1, 2010.

- an award of 31,447 shares of restricted stock on March 1, 2008, which is equal to $500,000 (the amount of cash incentive plan compensation that Mr. Peebler earned for fiscal 2007) divided by $15.90, which was the average of the closing sales price per share on the NYSE of our shares of common stock for the last ten business days of 2007. The shares of restricted stock vested on March 1, 2010. See *Employment Agreements Robert P. Peebler* below.

Mr. Hollis received an award of 15,000 shares of restricted stock in December 2007 and 20,000 shares of restricted stock in December 2008. Mr. Hollis employment with ION ended on January 29, 2010. As a result of the termination of his employment, 48,333 shares of restricted stock held by Mr. Hollis were forfeited on January 29, 2010.

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Mr. Hanson received an award of 15,000 shares of restricted stock in December 2007 and 15,000 shares of restricted stock in December 2008.

Mr. Friedemann received an award of 10,000 shares of restricted stock in December 2008.

Option Awards Column. All of the amounts shown in the Option Awards column reflect stock options and cash-settled stock appreciation rights (SARs) granted under our 2000 Long-Term Incentive Plan, 2003 Stock Option Plan, 2004 Long-Term Incentive Plan and April 2005 Inducement Equity Program and our Stock Appreciation Rights Plan, respectively. In each case, unless stated otherwise below, the options vest 25% each year over a four-year period and the SARs will vest on December 1, 2011. The values contained in the Summary Compensation Table are based on the grant date fair value of all awards (excluding any impact of assumed forfeiture rates). All of the exercise prices for the options and SARs equal or exceed the fair market value per share of ION common stock on the date of grant. In addition to the grants and awards in 2009 described in the *2009 Grants of Plan-Based Awards* table below:

In December 2008, Mr. Peebler was granted an award of options to purchase 180,000 shares of our common stock for an exercise price of $3.00 per share.

In December 2007, Mr. Hollis was granted an award of options to purchase 50,000 shares of our common stock for an exercise price of $15.43 per share; and in December, 2008, he was granted options to purchase 100,000 shares at $3.00 per share and 200,000 cash-settled SARs having an exercise price of $3.00 per SAR. Mr. Hollis employment with ION ended on January 29. 2010. As a result of the termination of his employment, unvested options to purchase 121,250 shares of our common stock held by Mr. Hollis and 200,000 unvested stock appreciation rights held by Mr. Hollis were each forfeited on January 29, 2010.

In December 2007, Mr. Hanson was granted an award of options to purchase 15,000 shares of our common stock for an exercise price of $15.43 per share; and in December 2008, he was granted options to purchase 70,000 shares at $3.00 per share and 140,000 cash-settled SARs having an exercise price of $3.00 per SAR.

In December 2008, Mr. Friedemann was granted an award of options to purchase 40,000 shares of our common stock for an exercise price of $3.00 per share.

All payments of non-equity incentive plan compensation reported for 2009 were made in March 2010 with regard to the 2009 fiscal year and were paid pursuant to our 2009 incentive plan.

We do not sponsor for our employees (i) any defined benefit or actuarial pension plans (including supplemental plans), (ii) any non-tax-qualified deferred compensation plans or arrangements or (iii) any nonqualified defined contribution plans.

Our general policy is that our executive officers do not receive any executive perquisites, or any other similar personal benefits that are different from what our salaried employees are entitled to receive. ION provides the named executive officers with certain group life, health, medical and other non-cash benefits generally available to all salaried employees, which are not included in the All Other Compensation column in the Summary Compensation Table pursuant to SEC rules. Except as noted below, the amounts shown in the All Other Compensation column consist of employer matching contributions to ION s 401(k) plan. In 2009, the 401(k) accounts for each of the named executive officers received the following matching contributions from the company: $3,317 for Mr. Peebler; $3,554 for Mr. Hollis; $2,601 for Mr. Hanson; $2,404 for Mr. Friedemann; and $2,492 for Mr. Roland.

2009 GRANTS OF PLAN-BASED AWARDS

Estimated Future Payouts Under Non-	All Other Stock Awards: Number of	All Other Option Awards: Number of Securities	Exercise or Base Price	Grant Date Fair Value of

Name	Grant Date	Equity Incentive Plan Awards(1)(2) Threshold ($)	Target ($)	Maxi-mum ($)	Shares of Stock or Units (#)(3)	Underlying Options (#)(4)	of Option Awards ($/Sh)	Stock and Option Awards ($)(5)
Robert P. Peebler(6)			431,250	862,500				
	3/1/09				36,424			38,974
	12/1/09				100,000			544,000
James R. Hollis(7)		48,125	192,500	385,000				
	12/1/09				30,000			163,200
R. Brian Hanson		40,875	163,500	327,000				
	12/1/09				75,000			408,000
Christopher M. Friedemann		32,769	131,075	262,150				
	12/1/09				10,000	15,000	5.44	106,885
David L. Roland		32,769	131,075	262,150				
	12/1/09				30,000	25,000	5.44	250,675

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(1) Reflects the estimated threshold, target and maximum award amounts for grants under our 2009 incentive plan to our named executive officers. Under the plan, every participating executive other than our Chief Executive Officer had the opportunity to earn a maximum of 100% of his or her base salary depending on performance of the company against the designated performance goal, and performance of the executive against personal performance criteria. Under separate terms approved by the Compensation Committee and contained in his employment agreement, Mr. Peebler, as our Chief Executive Officer, participated in the plan with potential to earn a target incentive

payment of 75% of his base salary, depending on achievement of the company s target consolidated performance goal and pre-designated personal critical success factors, and a maximum of 150% of his base salary upon achievement of the maximum consolidated performance goal and the personal critical success factors. Mr. Peebler s employment agreement does not specify that he will earn a bonus upon achievement of a threshold consolidated performance goal. Because award determinations under the plan were based in part on outcomes of personal evaluations of employee performance by our Chief Executive Officer and the Compensation Committee, the computation of actual awards generated under the plan upon achievement of threshold and target company performance criteria differed from the above estimates. See *Compensation Discussion and Analysis Elements of Compensation Annual Incentive Compensation* above. For actual payout amounts to our named executive officers under our 2009 incentive plan, see *Summary Compensation Table* above.

(2) Our company does not offer or sponsor any equity incentive plans (as that term is defined in Item 402(a) of Regulation S-K) for employees.

(3) All stock awards reflect the number of shares of restricted stock granted under our 2004 Long-Term Incentive Plan. While unvested, a holder of restricted stock is entitled to the same voting rights as all other holders of

common stock. In each case, unless stated otherwise below, the awards of shares of restricted stock vest in one-third increments each year, over a three-year period.

(4) All amounts reflect awards of stock options granted under our 2004 Long-Term Incentive Plan. In each case, unless stated otherwise below, the options vest 25% each year over a four-year period. All of the exercise prices for the options reflected in the above chart equal or exceed the fair market value per share of ION common stock on the date of grant (on November 30, 2009, the last completed trading day prior to the December 1, 2009 grant date, the closing price per share on the NYSE was $5.44).

(5) The values contained in the

table are based on the grant date fair value of the award computed in accordance with FAS 123R for financial statement reporting purposes, but exclude any impact of assumed forfeiture rates.

(6) Pursuant to his employment agreement, on March 1, 2009, Mr. Peebler received an award of 36,424 shares of restricted stock, which is equal to $110,000 (the amount of cash incentive plan compensation that Mr. Peebler earned for fiscal 2008) divided by $3.02, which was the average of the closing sales price per share on the NYSE of our shares of common stock for the last ten business days of 2008. The shares of restricted stock will vest on March 1, 2011. See *Employment Agreements Robert P. Peebler* below.

(7) Mr. Hollis employment with ION ended on January 29, 2010. As a result of the termination of his employment, unvested options to purchase 121,250 shares of our common stock held by Mr. Hollis, 200,000 unvested stock appreciation rights held by Mr. Hollis, and 48,333 shares of restricted stock held by Mr. Hollis were each forfeited on January 29, 2010.

Employment Agreements

We enter into employment agreements with senior officers, including some of the named executive officers, when the Compensation Committee determines that an employment agreement is desirable for us to obtain a measure of assurance as to the executive s continued employment in light of prevailing market competition for the particular position held by the executive officer, or where the Committee determines that an employment agreement is necessary and appropriate to attract an executive in light of market conditions, the prior experience of the executive or practices at ION with respect to other similarly situated employees. As of December 31, 2009, the only executives with employment agreements were Mr. Peebler, Mr. Hanson, Mr. Hollis and Mr. Roland. Mr. Hollis employment agreement terminated (other than the noncompete and nonsolicitation obligations, which by their terms survive the termination of his agreement) when his employment with the company ended on January 29, 2010.

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The following discussion describes the material terms of the employment agreements with Messrs. Peebler, Hanson and Roland:

Robert P. Peebler

Our employment agreement with Mr. Peebler, dated March 31, 2003, provides that Mr. Peebler will serve as President and Chief Executive Officer for a five-year term, unless sooner terminated. We amended Mr. Peebler s employment agreement in September 2006, February 2007, August 2007 and January 2009, to extend the term to December 31, 2011, and to make certain other changes. This description reflects Mr. Peebler s employment agreement as so amended, except where the context requires otherwise.

Under the agreement, Mr. Peebler is entitled to an annual base salary of at least $500,000, and to participate in all of our employee benefit plans available to senior executives at a level commensurate with his position. Mr. Peebler s annual base salary is currently $575,000.

Mr. Peebler was not guaranteed an annual bonus under his original 2003 employment agreement, but his 2006 amendment provides that Mr. Peebler will be eligible to participate in our annual incentive plan for 2006 and each full year thereafter, with target incentive plan bonus at 75% of his base salary and with maximum incentive plan bonus at 150% of his base salary. His annual bonus will be earned upon achievement of our consolidated operating income performance targets applicable to the senior leadership bonus plan for the relevant year, and Mr. Peebler s critical success factors as determined in advance by the Compensation Committee.

Under his employment agreement, Mr. Peebler received a grant in 2003 of an option to purchase 1,325,000 shares of our common stock at $6.00 per share, which exercise price exceeded the market price of our shares on the date of grant by 60% (at March 31, 2003, the date of his grant, the closing sales price per share of our common stock on the NYSE was $3.60). Mr. Peebler s amended employment agreement provides that he is entitled to receive (a) in 2007, an award of shares of restricted common stock based on the amount of the annual incentive plan bonus earned by him for 2006, vesting on the date that is the second anniversary of the date of the award; (b) in 2007, an award of shares of restricted common stock equivalent in value to his annual base salary, vesting on the date that is the third anniversary of the date of the award; and (c) in years following 2007 through the end of the term of his agreement, an award of shares of restricted common stock based on the amount of the annual incentive plan bonus, if any, earned by Mr. Peebler for the preceding year, vesting on the date that is the second anniversary of the date of the award, and additional stock options as may be determined by the Compensation Committee. The shares of restricted common stock will be subject to restrictions on disposition and, during the period that the shares of restricted common stock are unvested, Mr. Peebler will be entitled to the same voting and dividend rights as all other holders of common stock.

We may at any time terminate our employment agreement with Mr. Peebler for cause if Mr. Peebler (i) willfully and continuously fails to substantially perform his obligations, (ii) willfully engages in conduct materially and demonstrably injurious to our property or business (including fraud, misappropriation of funds or other property, other willful misconduct, gross negligence or conviction of a felony or any crime involving moral turpitude) or (iii) commits a material breach of the agreement. In addition, we may at any time terminate the agreement if Mr. Peebler suffers permanent and total disability for a period of at least 180 consecutive days, or if Mr. Peebler dies. Mr. Peebler may terminate his employment agreement for good reason if we breach any material provision of the agreement, we assign to Mr. Peebler any duties materially inconsistent with his position, we remove him from his current office, materially reduce his duties, functions, responsibilities or authority, or take other action that results in a diminution in his office, position, duties, functions, responsibilities or authority, or we relocate his workplace by more than 30 miles.

In his agreement, Mr. Peebler agrees not to compete against us, assist any competitor, attempt to solicit any of our suppliers or customers, or solicit any of our employees, in any case during his employment and for a period of two years after his employment ends. The employment agreement also contains provisions relating to protection of our confidential information and intellectual property. We also agreed to indemnify Mr. Peebler to the fullest extent permitted by our Certificate of Incorporation and Bylaws, and to provide him coverage under our directors and officers liability insurance policies to the same extent as our other executives.

For a discussion of the provisions of Mr. Peebler s employment agreement regarding compensation to Mr. Peebler in the event of our change of control or his termination by us without cause or by him for good reason, see *Potential*

Payments Upon Termination or Change of Control Robert P. Peebler below.

R. Brian Hanson

Our employment agreement with Mr. Hanson became effective in May 2006. We amended Mr. Hanson s employment agreement in August 2007 and in December 2008. This description reflects Mr. Hanson s employment agreement as so amended.

The agreement provides for Mr. Hanson to serve as our Executive Vice President and Chief Financial Officer for an initial term of three years, with automatic two-year renewals thereafter. Any change of control of our company will cause the remaining term of Mr. Hanson s employment agreement to automatically adjust to two years, commencing on the effective date of the change of control.

The agreement provides for Mr. Hanson to receive an initial base salary of $275,000 per year and be eligible to receive an annual performance bonus under our incentive compensation plan, with target plan incentive at 50% of his annual base salary and an opportunity to earn up to 100% of his annual base salary. Mr. Hanson s annual base salary is currently $327,000.

Under the agreement, in May 2006 Mr. Hanson was granted 75,000 shares of restricted common stock and options to purchase 75,000 shares of our common stock. The agreement also provides that Mr. Hanson is entitled to receive (a) in 2010, an award of shares of restricted common stock based on the amount of the annual incentive plan bonus earned by him for 2009; and (b) in years following 2010 through the end of the term of his agreement, an award of shares of restricted common stock based on the amount of the annual incentive plan bonus, if any, earned by Mr. Hanson with respect to the preceding year. The shares of restricted common stock will be subject to restrictions on disposition and will vest on the date that is the third anniversary date of the date of the award. During the period that the shares of restricted common stock are unvested, Mr. Hanson will be entitled to the same voting and dividend rights as all other holders of common stock. In the agreement, we also agreed to indemnify Mr. Hanson to the fullest extent permitted by our Certificate of Incorporation and Bylaws, and to provide him coverage under our directors and officers liability insurance policies to the same extent as other company executives.

For a discussion of the provisions of Mr. Hanson s employment agreement regarding compensation to Mr. Hanson in the event of our change of control or his termination by us without cause or by him for good reason, see *Potential Payments Upon Termination or Change of Control R. Brian Hanson* below.

David L. Roland

Our employment agreement with Mr. Roland provides for Mr. Roland to serve as our Vice President, General Counsel and Corporate Secretary for an initial term of two years, with automatic one-year renewals thereafter. He will also be eligible to receive an annual performance bonus under our incentive compensation plan, with his target incentive compensation to be set at 50% of his annual base salary, and an opportunity under the plan to earn incentive compensation in an amount of up to 100% of his annual base salary. In the agreement, we also agreed to indemnify Mr. Roland to the fullest extent permitted by our Certificate of Incorporation and Bylaws, and to provide him coverage under our directors and officers liability insurance policies to the same extent as other company executives.

For a discussion of the provisions of Mr. Roland s employment agreement regarding compensation to him in the event of his termination without cause or for good reason, see *Potential Payments Upon Termination or Change of Control David L. Roland* below.

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OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table sets forth information concerning unexercised stock options (including SARs) and shares of restricted stock held by our named executive officers at December 31, 2009:

	Option Awards(1)					Stock Awards(2)			
Name	**Number of Securities Underlying Unexercised Options (#) Exercisable**	**Number of Securities Underlying Unexercised Options (#) Unexercisable**	**Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)**	**Option Exercise Price ($)**	**Option Expiration Date**	**Number of Shares or Units of Stock That Have Not Vested (#)**	**Market Value of Shares or Units of Stock That Have Not Vested ($)(3)**	**Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)**	**Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)**
Robert P. Peebler	1,325,000			6.00	3/31/2013	205,296	1,215,352		
	45,000	135,000		3.00	12/01/2018				
James R. Hollis(4)	50,000			4.90	8/04/2013	48,333	286,131		
	10,000			3.80	11/24/2013				
	40,000			9.84	9/01/2014				
	15,000			7.31	8/02/2015				
	11,250	3,750		10.17	5/09/2016				
	33,750	11,250		9.97	9/01/2016				
	18,750	6,250		10.89	12/01/2016				
	25,000	25,000		15.43	12/01/2017				
	25,000	75,000		3.00	12/01/2018				
		200,000(5)		3.00	12/01/2018				
R. Brian Hanson	56,250	18,750		8.73	5/22/2016	90,000	532,800		
	15,000	5,000		9.97	9/01/2016				
	30,000	30,000		15.43	12/01/2017				
		140,000(5)		3.00	12/01/2018				

Christopher M. Friedemann	85,000		4.90	08/03/2013	19,999	118,394
	60,000		9.84	09/01/2014		
	40,000		7.31	08/03/2015		
	30,000	10,000	9.97	09/01/2016		
	20,000	20,000	15.43	12/01/2017		
	30,000	10,000	3.00	12/01/2018		
		15,000	5.44	12/01/2019		
David L. Roland	15,000		9.84	09/01/2014	39,999	236,794
	25,000		7.31	08/03/2015		
	22,500	7,500	9.97	09/01/2016		
	15,000	15,000	15.43	12/01/2017		
	7,500	22,500	3.00	12/01/2018		
		25,000	5.44	12/01/2019		

(1) All stock option information in this table relates to nonqualified stock options granted under our various stock plans and employment inducement programs. All of the options in this table, except for the options to purchase 1,325,000 shares held by Mr. Peebler, vest 25% each year over a four-year period. On March 31, 2003, under the terms of his employment agreement, Mr. Peebler received a one-time grant of options to purchase

1,325,000 shares of our common stock at $6.00 per share, which options vested in equal amounts monthly over a 3-year period commencing March 31, 2004. On March 31, 2003, the closing sale price per share of our common stock on the NYSE was $3.60. See *Employment Agreements Robert P. Peebler* above.

(2) The amounts shown represent shares of restricted stock granted under our 2000 Restricted Stock Plan or 2004 Long-Term Incentive Plan. While unvested, the holder is entitled to the same voting rights as all other holders of common stock. Except for certain shares of restricted stock held by Mr. Peebler, in each case the grants of shares of restricted stock vest in

one-third increments each year, over a three-year period. On March 1, 2007, Mr. Peebler received (a) an award of 37,425 shares of restricted stock, all of which shares vested on March 1, 2010. On March 1, 2008, Mr. Peebler received an award of 31,447 shares of restricted stock, all of which shares vested on March 1, 2010. On March 1, 2009, Mr. Peebler received an award of 36,424 shares of restricted stock, all of which shares will vest on March 1, 2011. See *Employment Agreements Robert P. Peebler* above.

(3) Pursuant to SEC rules, the market value of each executive s shares of unvested restricted stock was calculated by multiplying the number of shares by $5.92

(the closing price per share of our common stock on the NYSE on December 31, 2009).

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(4) Mr. Hollis employment with ION ended on January 29, 2010. As a result of the termination of his employment, on January 29, 2010 Mr. Hollis forfeited all of his SARs, 48,333 shares of restricted stock and unvested options to purchase 121,250 shares of common stock.

(5) The amounts shown reflect awards of cash-settled SARs granted on December 1, 2008 under our Stock Appreciation Rights Plan. The SARs awarded to Mr. Hollis were forfeited on January 29, 2010. Mr. Hanson s SARs will vest on December 1, 2011. See *Summary Compensation Table Discussion of Summary Compensation Table* above.

2009 OPTION EXERCISES AND STOCK VESTED

The following table sets forth certain information with respect to option and stock exercises by the named executive officers during the year ended December 31, 2009:

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(1)
Robert P. Peebler(2)			32,560	34,839
R. Brian Hanson(3)			35,000	127,600
James R. Hollis(4)			21,666	104,248
Christopher M. Friedemann(5)			10,000	46,834
David L. Roland(6)			9,333	45,147

(1) The values realized upon vesting of stock awards contained in the table are based on the market value of ION common stock on the date of vesting.

(2) The value realized by Mr. Peebler on the vesting of his restricted stock awards was calculated by multiplying 32,560 shares by $1.07 (the closing price per share of our common stock on the NYSE on February 27, 2009, the last completed trading date before his March 1, 2009 vesting date).

(3) The value realized by Mr. Hanson on the vesting of his restricted stock awards was calculated by multiplying (a) 25,000 shares by $2.80 (the closing price per share of our common stock on the NYSE on his May 22, 2009 vesting date) and (b) 10,000 shares by $5.76 (the closing price per share of our common stock on the NYSE on his December 1, 2009 vesting date).

(4) The value realized by Mr. Hollis on the vesting of his restricted stock awards was calculated by multiplying (a) 1,666 shares by $3.12 (the closing price per share of our common stock on the NYSE on May 8, 2009, the last completed trading date before his May 9, 2009 vesting date), (b) 5,000 shares by $2.53 (the closing price per

share of our common stock on the NYSE on his September 1, 2009 vesting date) and (c) 15,000 shares by 5.76 (the closing price per share of our common stock on the NYSE on his December 1, 2009 vesting date).

(5) The value realized by Mr. Friedemann on the vesting of his restricted stock awards was calculated by multiplying 3,333 shares by $2.53 (the closing price per share of our common stock on the NYSE on his September 1, 2009 vesting date) and (b) 6,667 shares by $5.76 (the closing price per share of our common stock on the NYSE on his December 1, 2009 vesting date).

(6) The value realized by Mr. Roland on the vesting of his restricted stock awards was calculated

by multiplying 2,666 shares by $2.53 (the closing price per share of our common stock on the NYSE on his September 1, 2009 vesting date) and (b) 6,667 shares by $5.76 (the closing price per share of our common stock on the NYSE on his December 1, 2009 vesting date).

Potential Payments Upon Termination or Change of Control

Under the terms of our equity-based compensation plans and our employment agreements, our Chief Executive Officer and certain of our other named executive officers are entitled to payments and benefits upon the occurrence of specified events including termination of employment (with and without cause) and upon a change in control of our company. The specific terms of these arrangements, as well as an estimate of the compensation that would have been payable had they been triggered as of December 31, 2009, are described in detail below. In the case of each employment agreement, the terms of these arrangements were established through the course of arms-length negotiations with each executive officer, both at the time of hire and at the times of any later amendment. As part of these negotiations, the Compensation Committee analyzed the terms of the same or similar arrangements for comparable executives employed by companies in our industry group. This approach was used by the Committee in setting the amounts payable and the triggering events under the arrangements. The termination of employment provisions of the employment agreements were entered into in order to address competitive concerns by providing those individuals with a fixed amount of compensation that would offset the potential risk of leaving their prior employer or foregoing other opportunities in order to join our company. At the time of entering into these arrangements, the Committee considered the aggregate potential obligations of our company in the context of the desirability of hiring the individual and the expected compensation upon joining us. However, these contractual severance and post-termination arrangements have not affected the decisions the Committee has made regarding other compensation elements and the rationale for compensation decisions made in connection with these arrangements.

The following summaries set forth estimated potential payments payable to our named executive officers upon termination of employment or a change of control of our company under their employment agreements and our stock plans and other compensation programs as if his employment had so terminated for these reasons, or the change of control had so occurred, on December 31, 2009. The Compensation Committee may, in its discretion, agree to revise, amend or add to the benefits if it deems advisable. For purposes of the following summaries, dollar amounts are estimates based on annual base salary as of December 31, 2009, benefits paid to the named executive officer in fiscal 2009 and stock and option holdings of the named executive officer as of December 31, 2009. The summaries assume a price per share of ION common stock of $5.92 per share, which was the closing price per share on December 31, 2009, as reported on the NYSE. The actual amounts to be paid to the named executive officers can only be determined at the time of each executive s separation from the company.

The amounts of potential future payments and benefits as set forth in the tables below, and the descriptions of the assumptions upon which such future payments and benefits are based and derived, may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are estimates of payments and benefits to certain of our executives upon their termination of employment or a change in control, and actual payments and benefits may vary materially from these estimates. Actual amounts can only be determined at the time of such executive s actual separation from our company or the time of such change in control event. Factors that could affect these amounts and assumptions include the timing during the year of any such event, the company s stock price, unforeseen future changes in our company s benefits and compensation methodology and the age of the executive.

Robert P. Peebler

Termination and Change of Control Under Employment Agreement. Mr. Peebler is entitled to certain benefits under his employment agreement upon any of the following events:

- we terminate his employment other than for cause, death or disability;
- Mr. Peebler resigns for good reason ; or
- Mr. Peebler resigns after remaining with us or with our successor for a period of 18 months following a change of control involving our company.

Under Mr. Peebler s employment agreement, a change of control occurs upon any of the following:

(1) the acquisition by a person or group of beneficial ownership of 51% or more of the outstanding shares of our common stock other than any acquisitions directly from ION, acquisitions by ION or an employee benefit plan maintained by ION, or certain permitted acquisitions in connection with a business combination (as defined in sub-paragraph (3) below);

(2) changes in directors on ION s Board such that the individuals that constitute the entire Board cease to constitute at least a majority of directors of the Board, other than new directors whose appointment or nomination for election was approved by a vote of at least two-thirds of the directors then constituting the entire Board (except

in the case of election contests);

(3) a business combination that is, a merger or consolidation involving ION or a sale of all or substantially all of ION s assets unless owners of ION common stock immediately following such business combination together own more than 60% of the total outstanding stock or voting power of the entity resulting from the business combination; or

(4) ION s stockholders approve the liquidation or dissolution of ION.

Upon the occurrence of any of the above events, Mr. Peebler would be entitled to receive the following (less applicable withholding taxes and subject to compliance with his two-year non-compete, non-solicit and no-hire obligations):

In the above scenarios, Mr. Peebler would be entitled to receive the following (less applicable withholding taxes and subject to compliance with his two-year non-compete, non-solicit and no-hire obligations):

a lump sum cash amount equal to 0.99 times his annual base salary;

over a two-year period, a cash amount equal to two times his annual base salary; and

all incentive plan bonuses then due to him under the terms of the relevant incentive compensation plan in effect for any previous year and a prorated portion of the target incentive plan bonus that he would have been eligible to receive under any incentive compensation plan in effect with respect to the current year.

We believe the above 18-month change-of-control benefit maximizes stockholder value because it motivates Mr. Peebler to remain in his position for a sufficient period of time following a change of control to ensure a smoother integration and transition for the new owners. Given his unique and high levels of experience and expertise in the seismic industry, we believe Mr. Peebler s severance structure is in our best interest because it ensures that for a two-year period after leaving our employment, Mr. Peebler will not be in a position to compete with us or otherwise adversely affect our business. Mr. Peebler s severance provisions are more generous than those of the other named executive officers and reflect the greater interest we have in protecting against any future competition from Mr. Peebler after his employment with us, and also the greater opportunity costs that he would bear if we decided to change our chief executive officer.

Change of Control Under Equity Incentive Plans. Mr. Peebler and our other named executive officers currently hold outstanding awards under one or more of the following four incentive plans: our Amended and Restated 2004 Long-Term Incentive Plan, our 2003 Employee Stock Option Plan, our 2000 Long-Term Incentive Plan and our Stock Appreciation Rights Plan. Under these plans, a change of control will be deemed to have occurred upon any of the following (which we refer to in this section as a Plan Change of Control):

(1) the acquisition by a person or group of beneficial ownership of 40% (or 51% under the 2003 Employee Stock Option Plan) or more of the outstanding shares of common stock other than acquisitions directly from ION, acquisitions by ION or an employee benefit plan maintained by ION, or certain permitted acquisitions in connection with a business combination described in sub-paragraph (3) below;

(2) changes in directors such that the individuals that constitute the entire board of directors cease to constitute at least a majority of directors of the board, other new directors whose appointment or nomination for election was approved by a vote of at least a majority of the directors (two-thirds of the directors under the 2003 Employee Stock Option Plan) then constituting the entire board of directors (except in the case of election contests);

(3) approval by our shareholders of a reorganization, merger, consolidation or similar business combination involving ION, unless (i) owners of our common stock immediately following such transaction together own more than 50% of the total outstanding stock or voting power of the entity resulting from the transaction (60% under the 2003 Employee Stock Option Plan) and (ii) at least a majority of the members of the board of directors of the entity resulting from the transaction were members of our board of directors at the time the agreement for the transaction is signed; or

(4) the sale of all or substantially all of the our assets (in the case of the Amended and Restated 2004 Long-Term Incentive Plan, the 2000 Long-Term Incentive Plan and the Stock Appreciation Rights Plan), or our shareholders approve our liquidation or dissolution (in the case of the 2003 Employee Stock Option Plan).

Upon any such Plan Change of Control, all of Mr. Peebler s stock options granted to him under the 2003 Employee Stock Option Plan and the Amended and Restated 2004 Long-Term Incentive Plan will become fully exercisable and restricted stock granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will automatically accelerate and become fully vested. Upon any of the above events, we would not be required to provide any medical continuation or death or disability benefits for Mr. Peebler that are not also available to our other employees as required by law or the applicable benefit plan.

Death or Disability. Upon his death or disability, any options or restricted stock Mr. Peebler holds under our 2004 Long-Term Incentive Plan would automatically accelerate and become fully vested. As of December 31, 2009, Mr. Peebler held 205,296 shares of restricted stock granted under our 2004 Long-Term Incentive Plan.

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Termination by Us for Cause or by Mr. Peebler Other Than for Good Reason. Upon his termination or resignation for any other reason, Mr. Peebler is not entitled to any payment or benefit other than the payment of unpaid salary and accrued and unused vacation pay.

Mr. Peebler s vested stock options will remain exercisable after his termination of employment, death, disability or retirement for periods of between 180 days and one year following such event, depending on the event and the terms of the applicable stock plan and grant agreement.

In addition, any voluntary termination of employment on or after December 31, 2010, will be treated for all purposes under our 2004 Long-Term Incentive Plan as a termination due to the retirement of Mr. Peebler, thereby causing all of his unvested stock options and restricted stock granted under that plan to automatically accelerate and become fully vested.

If any payment or benefit under his employment agreement is determined to be subject to the excise tax for excess parachute payments under U.S. federal income tax rules, we have agreed to pay to Mr. Peebler an additional amount to adjust for the incremental tax costs of those payments to him.

Assuming Mr. Peebler s employment was terminated under each of these circumstances or a change of control occurred on December 31, 2009, his payments and benefits would have an estimated value as follows (less applicable withholding taxes):

Scenario	**Cash Severance ($)(1)**	**Bonus ($)**	**Tax Gross-Ups ($)**	**Value of Accelerated Equity Awards ($)(2)**
Without Cause or For Good Reason	1,719,250	431,250		
Resign 18 months after change of control	1,719,250	431,250		
Change of Control (regardless of termination)				1,609,552
Death or Disability				1,609,552
Voluntary Termination				1,609,552

(1) $569,250 would be payable immediately and $1,150,000 would be payable over a two-year period. In addition to the listed amounts, if Mr. Peebler resigns or his employment is terminated for any reason, he would be entitled to be paid for his unused vacation days.

Mr. Peebler is currently entitled to 20 vacation days per year. The above table assumes that there is no earned but unpaid base salary as of the time of termination.

(2) As of December 31, 2009, Mr. Peebler held 205,296 shares of unvested restricted stock and unvested options to purchase 135,000 shares of our common stock. The value of accelerated unvested options was calculated by multiplying 135,000 shares underlying Mr. Peebler s unvested options by $5.92 (the closing price per share on December 31, 2009) and then deducting the $3.00 exercise price for those shares. The value of accelerated unvested restricted stock was calculated

by multiplying
205,296 shares
by $5.92.

R. Brian Hanson

Termination and Change of Control. Mr. Hanson is entitled to certain benefits under his employment agreement upon any of the following events:

- we terminate his employment other than for cause, death or disability;
- Mr. Hanson resigns for good reason ; or
- Mr. Hanson resigns after remaining with us or with our successor for a period of 12 months following a change in control involving our company.

Under Mr. Hanson s employment agreement, a change in control occurs upon any of the following:

(1) the acquisition by a person or group of beneficial ownership of 40% or more of our outstanding shares of common stock other than any acquisitions directly from ION, acquisitions by ION or an employee benefit plan maintained by ION, or certain permitted acquisitions in connection with a Merger (as defined in sub-paragraph (3) below);

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(2) changes in directors on our board of directors such that the individuals that constitute the entire board cease to constitute at least a majority of directors of the board, other than new directors whose appointment or nomination for election was approved by a vote of at a majority of the directors then constituting the entire board of directors (except in the case of election contests);

(3) approval by our stockholders of a Merger that is, a reorganization, merger, consolidation or similar business combination involving ION unless (i) owners of ION common stock immediately following such business combination together own more than 50% of the total outstanding stock or voting power of the entity resulting from the business combination in substantially the same proportion as their ownership of ION voting securities immediately prior to such Merger and (ii) at least a majority of the members of the board of directors of the corporation resulting from such Merger (or its parent corporation) were members ION s board at the time of the execution of the initial agreement providing for the Merger; or

(4) the sale or other disposition of all or substantially all of our assets.

Upon the occurrence of any of the above events, Mr. Hanson would be entitled to receive the following (less applicable withholding taxes and subject to compliance with non-compete, non-solicit and no-hire obligations):In the above scenarios, Mr. Hanson would be entitled to receive the following (less applicable withholding taxes and subject to compliance with non-compete, non-solicit and no-hire obligations):

- over a two-year period, a cash amount equal to two times his annual base salary;

- all incentive plan bonuses then due to him under the terms of the relevant incentive compensation plan in effect for any previous year and a prorated portion of the target incentive plan bonus that he would have been eligible to receive under any incentive compensation plan in effect with respect to the current year; and

- continuation of insurance coverage for Mr. Hanson as of the date of his termination for a period of one year at the same cost to him as prior to the termination.

We believe the above 12-month change-of-control benefit maximizes stockholder value because it motivates Mr. Hanson to remain in his position for a sufficient period of time following a change of control to ensure a smoother integration and transition for the new owners.

Upon a Plan Change of Control (see *Robert P. Peebler Change of Control Under Equity Incentive Plans* above), all of Mr. Hanson s stock options granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will become fully exercisable, all restricted stock awards granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will automatically accelerate and become fully vested and all SARs granted to him under the Stock Appreciation Rights Plan will become fully vested and immediately exercisable. In addition, any change of control of our company will cause the remaining term of Mr. Hanson s employment agreement to automatically adjust to two years, commencing on the effective date of the change of control.

Death, Disability or Retirement. Upon his death, disability or retirement, all options, restricted stock and SARs that Mr. Hanson holds would automatically accelerate and become fully vested.

Termination by Us for Cause or by Mr. Hanson Other Than for Good Reason. Upon any termination by us for cause or any resignation by Mr. Hanson for any reason other than good reason (as defined in his employment agreement), Mr. Hanson is not entitled to any payment or benefit other than the payment of unpaid salary and accrued and unused vacation pay.

Mr. Hanson s vested stock options and SARs will remain exercisable after his termination of employment, death, disability or retirement for periods of between 180 days and one year following such event, depending on the event and the terms of the applicable plan and grant agreement. If Mr. Hanson is terminated for cause, all of his vested and unvested stock options, unvested restricted stock and unvested SARs will be immediately forfeited.

If any payment or benefit under his employment agreement is determined to be subject to the excise tax for excess parachute payments under U.S. federal income tax rules, we have agreed to pay to Mr. Hanson an additional amount to adjust for the incremental tax costs of those payments to him.

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Assuming Mr. Hanson s employment was terminated under each of these circumstances or a change of control occurred on December 31, 2009, his payments and benefits would have an estimated value as follows (less applicable withholding taxes):

Scenario	Cash Severance ($)(1)	Bonus ($)(2)	Insurance Continuation ($)(3)	Tax Gross-Ups ($)	Value of Accelerated Equity Awards ($)(4)
Without Cause or For Good Reason	654,000	163,500	14,499		
Resign 12 months after change of control	654,000	163,500	14,499		
Change of Control (regardless of termination) or Death, Disability or Retirement					1,057,200
Voluntary Termination					

(1) Payable over a two-year period. In addition to the listed amounts, if Mr. Hanson resigns or his employment is terminated for any reason, he would be entitled to be paid for his unused vacation days. Mr. Hanson is currently entitled to 20 vacation days per year. The above table assumes that there is no earned but unpaid base salary as of the time of termination.

(2) Represents an estimate of the

target bonus payment Mr. Hanson would be entitled to receive pursuant to our 2009 incentive plan. The actual bonus payment he would be entitled to receive upon his termination may be different from the estimated amount, depending on the achievement of payment criteria under the bonus plan.

(3) The value of insurance continuation contained in the above table is the total cost of COBRA continuation coverage for Mr. Hanson, maintaining his same levels of medical, dental and other insurance in effect as of December 31, 2009, less the amount of premiums to be paid by Mr. Hanson for such coverage.

(4) As of December 31, 2009,

Mr. Hanson held 75,000 unvested shares of restricted stock, unvested stock options to purchase 106,250 shares of common stock and 140,000 SARs. The value of accelerated unvested options was calculated by multiplying 75,000 shares underlying Mr. Hanson s unvested options by $5.92 (the closing price per share on December 31, 2009) and then deducting the aggregate exercise price for those shares (equal to $3.00 per share for 70,000 options). Options having an exercise price greater than $5.92 were calculated with a zero value. The value of accelerated unvested restricted stock was calculated by multiplying 75,000 shares by $5.92. The value of accelerated unvested SARs was calculated by multiplying 140,000 shares by $5.92 and then deducting the settlement price of $3.00.

James R. Hollis

Mr. Hollis voluntarily resigned as ION s President and Chief Operating Officer, effective on January 29, 2010. As a result of his resignation, Mr. Hollis forfeited his rights to (i) 48,333 shares of restricted stock, (ii) unvested options to purchase 121,250 shares of common stock and (iii) 200,000 unvested stock appreciation rights. Other than payment for his accrued and unused vacation time pursuant to Texas law and under our employment policies, Mr. Hollis did not receive any severance or other payments upon his resignation, and he is not entitled to receive any severance or other payments in the future.

The following summary sets forth estimated potential payments that would have been payable to Mr. Hollis upon his termination of employment or a change of control of our company under his former employment agreement and our stock plans and other compensation programs as if his employment had so terminated for these reasons, or the change of control had so occurred, on December 31, 2009.

Termination and Change of Control. Mr. Hollis would have been entitled to certain benefits under his employment agreement upon any of the following events:

we terminated his employment other than for cause, death or disability;

Mr. Hollis resigned for good reason ; or

Mr. Hollis resigned after remaining with us or with our successor for a period of 12 months following a change in control involving our company.

Under Mr. Hollis employment agreement, a change in control would be considered to have occurred upon any of the following:

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(1) the acquisition by a person or group of beneficial ownership of 40% or more of the outstanding shares of common stock other than any acquisitions directly from ION, acquisitions by ION or an employee benefit plan maintained by ION, or certain permitted acquisitions in connection with a Merger (as defined in sub-paragraph (3) below);

(2) changes in directors on ION s board of directors such that the individuals that constitute the entire board of directors cease to constitute at least a majority of directors of the board, other than new directors whose appointment or nomination for election was approved by a vote of at a majority of the directors then constituting the entire board (except in the case of election contests);

(3) approval by ION s stockholders of a Merger that is, a reorganization, merger, consolidation or similar business combination involving ION unless (i) owners of ION common stock immediately following such business combination together own more than 50% of the total outstanding stock or voting power of the entity resulting from the business combination in substantially the same proportion as their ownership of ION voting securities were immediately prior to the Merger and (ii) at least a majority of the members of the board of directors of the corporation resulting from such Merger (or its parent corporation) were members of ION s board at the time of the execution of the initial agreement providing for the Merger; or

(4) the sale or other disposition of all or substantially all of the assets of ION.

Upon the occurrence of any of the above three events, Mr. Hollis would have been entitled to receive the following (less applicable withholding taxes and subject to compliance with non-compete, non-solicit and no-hire obligations):

over a two-year period, a cash amount equal to two times his annual base salary;

all incentive plan bonuses then due to him under the terms of the relevant incentive compensation plan in effect for any previous year and a prorated portion of the target incentive plan bonus that he would have been eligible to receive under any incentive compensation plan in effect with respect to the current year; and

continuation of insurance coverage for Mr. Hollis as of the date of his termination for a period of one year at the same cost to him as prior to the termination.

Upon a Plan Change of Control involving ION (see *Robert P. Peebler Change of Control Under Equity Incentive Plans* above), all of Mr. Hollis stock options granted to him under the Amended and Restated 2004 Long-Term Incentive Plan would have become fully exercisable, restricted stock granted to him under the Amended and Restated 2004 Long-Term Incentive Plan would have automatically accelerated and become fully vested and all SARs granted to him under the Stock Appreciation Rights Plan would have become fully vested and immediately exercisable. In addition, any change of control of our company would have caused the remaining term of Mr. Hollis employment agreement to automatically adjust to two years, commencing on the effective date of the change of control.

Death, Disability or Retirement. Upon his death, disability or retirement, all options, restricted stock and SARs that Mr. Hollis holds would have automatically accelerated and become fully vested.

Termination by Us for Cause or by Mr. Hollis Other Than for Good Reason. Upon any termination by us for cause or any resignation by Mr. Hollis for any reason other than good reason (as defined in his employment agreement), Mr. Hollis would not be entitled to any payment or benefit other than the payment of unpaid salary and accrued and unused vacation pay.

Mr. Hollis vested stock options and SARs would have remained exercisable after his termination of employment, death, disability or retirement for periods of between 180 days and one year following such event, depending on the event and the terms of the applicable plan and grant agreement. If Mr. Hollis would have been terminated for cause, all of his vested and unvested stock options, unvested restricted stock and unvested SARs would have been immediately forfeited.

If any payment or benefit under his employment agreement was determined to be subject to the excise tax for excess parachute payments under U.S. federal income tax rules, we had agreed to pay to Mr. Hollis an additional amount to adjust for the incremental tax costs of those payments to him.

Assuming Mr. Hollis employment was terminated under each of these circumstances or a change of control occurred on December 31, 2009, his payments and benefits would have had an estimated value as follows (less applicable withholding taxes):

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Scenario	Cash Severance ($)(1)	Bonus ($)(2)	Insurance Continuation ($)(3)	Tax Gross-Ups ($)	Value of Accelerated Equity Awards ($)(4)
Without Cause or For Good Reason	770,000	192,500	12,142		
Resign 12 months after change of control	770,000	192,500	12,142		
Change of Control (regardless of termination) or Death, Disability or Retirement					1,089,131
Voluntary Termination					

(1) Payable over a two-year period. In addition to the amounts listed in the table, if Mr. Hollis resigned or his employment had been terminated for any reason, he would be entitled to be paid for his unused vacation days. As of December 31, 2009, Mr. Hollis was entitled to 20 vacation days per year. The above table assumes that there is no earned but unpaid base salary as of the time of termination.

(2) Represents an estimate of the target bonus payment

Mr. Hollis would have been entitled to receive pursuant to our 2009 incentive plan. The actual bonus payment he would have been entitled to receive upon his termination may be different from the estimated amount, depending on the achievement of the payment criteria under the bonus plan.

(3) The value of insurance continuation contained in the above table is the total cost of COBRA continuation coverage for Mr. Hollis, maintaining his same levels of medical, dental and other insurance in effect as of December 31, 2009, less the amount of premiums to be paid by Mr. Hollis for such coverage.

(4) As of December 31, 2009, Mr. Hollis held 48,333 unvested shares

of restricted stock, unvested stock options to purchase 121,250 shares of common stock and 200,000 SARs. The value of accelerated unvested options was calculated by multiplying 75,000 shares underlying certain of Mr. Hollis unvested options by $5.92 (the closing price per share on December 31, 2009) and then deducting the aggregate exercise price for those shares (equal to $3.00 per share for 75,000 options). Options having an exercise price greater than $5.92 were calculated with a zero value. The value of accelerated unvested restricted stock was calculated by multiplying 48,333 shares by $5.92. The value of accelerated unvested SARs was calculated by multiplying

200,000 shares by $5.92 and then deducting the settlement price of $3.00.

Christopher M. Friedemann

Mr. Friedemann is not entitled to receive any contractual severance if we terminate his employment without cause. Upon a Plan Change of Control (see *Robert P. Peebler Change of Control Under Equity Incentive Plans* above), all of his unvested stock options granted to him under the Amended and Restated 2004 Long-Term Incentive Plan and the 2000 Long-Term Incentive Plan will become fully exercisable and all restricted stock awards granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will automatically accelerate and become fully vested. Upon his retirement, death or disability, all unvested options and restricted stock he holds will automatically accelerate and become fully vested.

The vested stock options held by Mr. Friedemann will remain exercisable after his termination of employment, death, disability or retirement for periods of between 180 days and one year following such event, depending on the event and the terms of the applicable stock plan and grant agreement. If Mr. Friedemann is terminated for cause, all of his vested and unvested stock options and unvested restricted stock will be immediately forfeited.

Assuming his employment was terminated under each of these circumstances or a change of control occurred on December 31, 2009, his payments and benefits would have an estimated value as follows (less applicable withholding taxes):

Scenario	Cash Severance ($)(1)	Value of Accelerated Equity Awards ($)(2)
Without Cause		
Change of Control (regardless of termination) or Death, Disability or Retirement		235,194
Voluntary Termination		

(1) In addition to the listed amounts, if Mr. Friedemann resigns or his employment is terminated for any reason, he would be entitled to be paid for his unused vacation days. Mr. Friedemann is currently entitled to 20 vacation days per year. The above table assumes that there is no

earned but unpaid base salary as of the time of termination.

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(2) As of December 31, 2009, Mr. Friedemann held 19,999 unvested shares of restricted stock and unvested options to purchase 75,000 shares of our common stock. The value of accelerated unvested options was calculated by multiplying 75,000 shares underlying Mr. Friedemann s unvested options by $5.92 (the closing price per share on December 31, 2009) and then deducting the aggregate exercise prices for those shares (equal to $3.00 per share for 40,000 options). Options having an exercise price greater than $5.92 were calculated with a zero value. The value of his accelerated unvested restricted stock was calculated by multiplying 19,999 shares by $5.92.

David L. Roland

Termination and Change of Control. Mr. Roland is entitled to certain benefits under his employment agreement upon any of the following events:

we terminate his employment other than for cause, death or disability; or

Mr. Roland resigns for good reason.

In the above scenarios, Mr. Roland would be entitled to receive the following (less applicable withholding taxes):

over a one-year period, a cash amount equal to his annual base salary;

all incentive plan bonuses then due to him under the terms of the relevant incentive compensation plan in effect for any previous year and a prorated portion of the target incentive plan bonus that he would have been eligible to receive under any incentive compensation plan in effect with respect to the current year; and

continuation of insurance coverage for Mr. Roland as of the date of his termination for a period of one year at the same cost to him as prior to the termination.

Upon a Plan Change of Control (see *Robert P. Peebler Change of Control Under Equity Incentive Plans* above), all of Mr. Roland s unvested stock options granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will become fully exercisable and restricted stock granted to him under the Amended and Restated 2004 Long-Term Incentive Plan will automatically accelerate and become fully vested. Mr. Roland s employment agreement contains no change-of-control severance payment rights.

Death, Disability or Retirement. Upon his death, disability or retirement, all options and restricted stock that Mr. Roland holds would automatically accelerate and become fully vested.

Termination by Us for Cause or by Mr. Roland Other Than for Good Reason. Upon any termination by us for cause or any resignation by Mr. Roland for any reason other than good reason (as defined in his employment agreement), Mr. Roland is not entitled to any payment or benefit other than the payment of unpaid salary and accrued and unused vacation pay.

Mr. Roland s vested stock options will remain exercisable after his termination of employment, death, disability or retirement for periods of between 180 days and one year following such event, depending on the event and the terms of the applicable stock plan and grant agreement. If Mr. Roland is terminated for cause, all of his vested and unvested stock options and unvested restricted stock will be immediately forfeited.

Assuming Mr. Roland s employment was terminated under each of these circumstances or a change of control occurred on December 31, 2009, his payments and benefits would have an estimated value as follows (less applicable withholding taxes):

Scenario	**Cash Severance ($)(1)**	**Bonus ($)(2)**	**Insurance Continuation ($)(3)**	**Tax Gross-Ups ($)**	**Value of Accelerated Equity Awards ($)(4)**
Without Cause or For Good Reason	270,000	135,000	14,436		
Change of Control (regardless of termination) or Death, Disability or Retirement					302,494
Voluntary Termination					

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(1) Payable over a one-year period. In addition to the listed amounts, if Mr. Roland resigns or his employment is terminated for any reason, he would be entitled to be paid for his unused vacation days. Mr. Roland is currently entitled to 20 vacation days per year. The above table assumes that there is no earned but unpaid base salary as of the time of termination.

(2) Represents an estimate of the target bonus payment Mr. Roland would be entitled to receive pursuant to our 2009 incentive plan. The actual bonus payment he would be entitled to receive upon his termination may be different from the estimated

amount, depending on the achievement of payment criteria under the bonus plan.

(3) The value of insurance continuation contained in the above table is the total cost of COBRA continuation coverage for Mr. Roland, maintaining his same levels of medical, dental and other insurance in effect as of December 31, 2009, less the amount of premiums to be paid by Mr. Roland for such coverage.

(4) As of December 31, 2009, Mr. Roland held 39,999 unvested shares of restricted stock and unvested stock options to purchase 70,000 shares of common stock. The value of accelerated unvested options was calculated by multiplying 70,000 shares underlying

Mr. Roland s unvested options by $5.92 (the closing price per share on December 31, 2009) and then deducting the aggregate exercise prices for those shares (equal to $3.00 per share for 22,500 options). Options having an exercise price greater than $5.92 were calculated with a zero value. The value of accelerated unvested restricted stock was calculated by multiplying 39,999 shares by $5.92.

2008 Pension Benefits And Nonqualified Deferred Compensation

None of our named executive officers participates or has account balances in (i) any qualified or non-qualified defined benefit plans or (ii) in any non-qualified defined contribution plans or other deferred compensation plans maintained by us.

DIRECTOR COMPENSATION

General

ION employees who are also directors do not receive any fee or remuneration for services as members of our Board of Directors. We currently have nine non-employee directors who qualify for compensation as directors. In addition to being reimbursed for all reasonable out-of-pocket expenses that the director incurs attending Board meetings and functions, until March 2009 our outside directors received an annual retainer fee of $46,000. In addition, until March 2009 the Chairman of the Audit Committee had been entitled to receive an annual retainer fee of $12,500, the Chairman of the Compensation Committee had been entitled to receive an annual retainer fee of $10,000, the Chairman of the Governance Committee had been entitled to receive an annual retainer fee of $5,000, and each co-Chairman of the Finance Committee had been entitled to receive an annual retainer fee of $5,000. Until March 2009, outside directors also received, in cash, $2,000 for each Board meeting and $2,000 for each committee meeting attended (unless the committee meeting was held in conjunction with a Board meeting, in which case the fee for committee meeting attendance was $1,000) and $1,000 for each Board or committee meeting held via teleconference.

In order to reduce operating costs during the market downturn resulting from the economic recession and decline in oil and gas prices, in March 2009 the Board reduced by 15% the amount of retainer and meeting fees each director receives, so that commencing effective in April 2009, our outside directors received an annual retainer fee of $39,100, the Chairman of the Audit Committee received an annual retainer fee of $10,600, the Chairman of the Compensation

Committee received an annual retainer fee of $8,500, the Chairman of the Governance Committee received an annual retainer fee of $4,300, each co-Chairman of the Finance Committee received an annual retainer fee of $4,300, and each outside director received $1,700 for each in-person Board meeting attended and $1,700 for each in-person committee meeting attended (unless the committee meeting is held in conjunction with a Board meeting, in which case the fee for committee meeting attendance was $900) and $900 for each Board or committee meeting held via teleconference. Effective on November 1, 2009, the amount of retainer and meeting fees each director receives increased to its amount in effect prior to the March 2009 reduction.

Each outside director also receives an initial grant of 8,000 vested shares of our common stock on the first quarterly grant date after joining the Board and follow-on grants of 12,000 vested shares of our stock each year.

In 1992, we adopted a Directors Retirement Plan. We discontinued this plan in 1996. Mr. Elliott is the only director entitled to receive any benefits under the Directors Retirement Plan. This plan requires us to make a lump sum payment to Mr. Elliott following his retirement from the Board, in an amount equal to the present value of $15,000 to be received annually for a period of ten years.

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The following table summarizes the compensation earned by ION s non-employee directors in 2009:

Name(1)	Fees Earned or Paid in Cash ($)	Stock Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
James M. Lapeyre, Jr.	71,400	65,280				136,680
Bruce S. Appelbaum, PhD	65,200	65,280				130,480
Theodore H. Elliott, Jr.	64,200	65,280				129,480
G. Thomas Marsh	56,600	86,680				143,280
Franklin Myers	83,700	65,280				148,980
S. James Nelson, Jr.	84,700	65,280				149,980
John N. Seitz	65,200	65,280				130,480
Nicholas G. Vlahakis	56,700	86,680				143,380
Guo Yueliang(3)						

(1) Robert P. Peebler, our Chief Executive Officer, is not included in this table because he is an employee of ION and therefore received no compensation for his services as a director. The compensation received by Mr. Peebler as an employee of ION is shown in the Summary Compensation Table above.

(2) All of the amounts shown

represent the value of common stock granted under our 2004 Long-Term Incentive Plan. On March 1, 2009, Messrs. Marsh and Vlahakis were each granted an award of 20,000 shares of ION common stock pursuant to the Director Compensation terms discussed above. On December 1, 2009, each of our non-employee directors was granted an award of 12,000 shares of ION common stock. The values contained in the table are based on the grant-date fair value of awards of stock during the fiscal year.

(3) Mr. Guo was appointed to the Board effective on April 1, 2010.

As of December 31, 2009, our non-employee directors held the following unvested and unexercised ION equity awards:

Name	Unvested Stock Awards(#)	Unexercised Option Awards(#)
James M. Lapeyre, Jr.		90,000
Bruce S. Appelbaum, PhD		80,000

Theodore H. Elliott, Jr.	70,000
G. Thomas Marsh	
Franklin Myers	55,000
S. James Nelson, Jr.	70,000
John N. Seitz	80,000
Nicholas G. Vlahakis	
Guo Yueliang	

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) *List of Documents Filed*

(1) *Financial Statements*

The financial statements filed as part of this report are listed in the Index to Consolidated Financial Statements on page F-1 of ION s Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2010.

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(2) *Financial Statement Schedules*

The following financial statement schedule is listed in the Index to Consolidated Financial Statements on page F-1 of ION s Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2010:

Schedule II Valuation and Qualifying Accounts

All other schedules are omitted because they are not applicable or the requested information is shown in the financial statements or noted therein.

(3) *Exhibits*

3.1	Restated Certificate of Incorporation dated September 24, 2007 filed on September 24, 2007 as Exhibit 3.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.
3.2	Amended and Restated Bylaws of ION Geophysical Corporation filed on September 24, 2007 as Exhibit 3.5 to the Company s Current Report on Form 8-K and incorporated herein by reference.
3.3	Certificate of Ownership and Merger merging ION Geophysical Corporation with and into Input/Output, Inc. dated September 21, 2007, filed on September 24, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.1	Certificate of Rights and Designations of Series D-1 Cumulative Convertible Preferred Stock, dated February 16, 2005 and filed on February 17, 2005 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.2	Certificate of Elimination of Series B Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.3	Certificate of Elimination of Series C Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.4	Certificate of Designation of Series D-2 Cumulative Convertible Preferred Stock dated December 6, 2007, filed on December 6, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.5	Certificate of Designation of Series D-3 Cumulative Convertible Preferred Stock dated February 20, 2008, filed on February 22, 2008 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.6	Certificate of Designations of Series A Junior Participating Preferred Stock of ION Geophysical Corporation effective as of December 31, 2008, filed on January 5, 2009 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.7	Form of Senior Indenture, filed on December 19, 2008 as Exhibit 4.3 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.8	Form of Senior Note, filed on December 19, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.

4.9	Form of Subordinated Indenture, filed on December 19, 2008 as Exhibit 4.5 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.10	Form of Subordinated Note, filed on December 19, 2008 as Exhibit 4.6 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.11	Warrant to Purchase Shares of the Common Stock of ION Geophysical Corporation dated October 27, 2009, issued by ION Geophysical Corporation to BGP Inc., China National Petroleum Corporation, filed on October 29, 2009 as Exhibit 4.1 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.
4.12	Convertible Promissory Note, dated October 23, 2009, issued by ION Geophysical Corporation to the Bank of China, New York Branch, filed on October 29, 2009 as Exhibit 4.2 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.
4.13	Convertible Promissory Note, dated October 23, 2009, issued by ION International S.à r.l. to the Bank of China, New York Branch, filed on October 29, 2009 as Exhibit 4.3 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.

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**10.1	Amended and Restated 1990 Stock Option Plan, filed on June 9, 1999 as Exhibit 4.2 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
10.2	Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park II, LP as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.2 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
10.3	Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park District as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.3 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
**10.4	Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan, filed on June 9, 1999 as Exhibit 4.3 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
**10.5	Amendment No. 1 to the Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan dated September 13, 1999 filed on November 14, 1999 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 1999 and incorporated herein by reference.
**10.6	Employment Agreement dated effective as of May 22, 2006 between Input/Output, Inc. and R. Brian Hanson, filed on May 1, 2006 as Exhibit 10.1 to the Company s Form 8-K, and incorporated herein by reference.
**10.7	First Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and R. Brian Hanson, filed on August 21, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.8	Second Amendment to Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and R. Brian Hanson, filed on January 29, 2009 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.9	Input/Output, Inc. Employee Stock Purchase Plan, filed on March 28, 1997 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-24125), and incorporated herein by reference.
**10.10	Fourth Amended and Restated 2004 Long-Term Incentive Plan, filed as Appendix A to the definitive proxy statement for the 2008 Annual Meeting of Stockholders of ION Geophysical Corporation, filed on April 21, 2008, and incorporated herein by reference.
10.11	Registration Rights Agreement dated as of November 16, 1998, by and among the Company and The Laitram Corporation, filed on March 12, 2004 as Exhibit 10.7 to the Company s Annual Report on Form 10-K for the year ended December 31, 2003, and incorporated herein by reference.

**10.12	Input/Output, Inc. 1998 Restricted Stock Plan dated as of June 1, 1998, filed on June 9, 1999 as Exhibit 4.7 to the Company s Registration Statement on S-8 (Registration No. 333-80297), and incorporated herein by reference.
**10.13	Input/Output Inc. Non-qualified Deferred Compensation Plan, filed on April 1, 2002 as Exhibit 10.14 to the Company s Annual Report on Form 10-K for the year ended December 31, 2001, and incorporated herein by reference.
**10.14	Input/Output, Inc. 2000 Restricted Stock Plan, effective as of March 13, 2000, filed on August 17, 2000 as Exhibit 10.27 to the Company s Annual Report on Form 10-K for the fiscal year ended May 31, 2000, and incorporated herein by reference.
**10.15	Input/Output, Inc. 2000 Long-Term Incentive Plan, filed on November 6, 2000 as Exhibit 4.7 to the Company s Registration Statement on Form S-8 (Registration No. 333-49382), and incorporated by reference herein.
**10.16	Employment Agreement dated effective as of March 31, 2003, by and between the Company and Robert P. Peebler, filed on March 31, 2003 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.17	First Amendment to Employment Agreement dated September 6, 2006, between Input/Output, Inc. and Robert P. Peebler, filed on September 7, 2006, as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.18	Second Amendment to Employment Agreement dated February 16, 2007, between Input/Output, Inc. and Robert P. Peebler, filed on February 16, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.19	Third Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and Robert P. Peebler, filed on August 21, 2007 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.

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**10.20	Fourth Amendment to Employment Agreement, dated as of January 26, 2009, between ION Geophysical Corporation and Robert P. Peebler, filed on January 29, 2009 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.21	Employment Agreement dated effective as of June 15, 2004, by and between the Company and David L. Roland, filed on August 9, 2004 as Exhibit 10.5 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
**10.22	Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and James R. Hollis, filed on January 29, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.23	GX Technology Corporation Employee Stock Option Plan, filed on August 9, 2004 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
10.24	Concept Systems Holdings Limited Share Acquisition Agreement dated February 23, 2004, filed on March 5, 2004 as Exhibit 2.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
10.25	Registration Rights Agreement by and between ION Geophysical Corporation and 1236929 Alberta Ltd. dated September 18, 2008, filed on November 7, 2008 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q and incorporated herein by reference.
**10.26	Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. Concept Systems Employment Inducement Stock Option Program, filed on July 27, 2004 as Exhibit 4.1 to the Company s Registration Statement on Form S-8 (Reg. No. 333-117716), and incorporated herein by reference.
**10.27	Form of Employee Stock Option Award Agreement for ARAM Systems Employee Inducement Stock Option Program, filed on November 14, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-155378) and incorporated herein by reference.
10.28	Agreement dated as of February 15, 2005, between Input/Output, Inc. and Fletcher International, Ltd., filed on February 17, 2005 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.29	First Amendment to Agreement, dated as of May 6, 2005, between the Company and Fletcher International, Ltd., filed on May 10, 2005 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.30	Input/Output, Inc. 2003 Stock Option Plan, dated March 27, 2003, filed as Appendix B of the Company s definitive proxy statement filed with the SEC on April 30, 2003, and incorporated herein by reference.
10.31	Amended and Restated Credit Agreement dated as of July 3, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger

	and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on July 8, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.32	First Amendment to Amended and Restated Credit Agreement and Domestic Security Agreement, dated as of September 17, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on September 23, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.33	Third Amendment to Amended and Restated Credit Agreement dated as of December 29, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.34	Fourth Amendment to Amended and Restated Credit Agreement and Foreign Security Agreement, Limited Waiver and Release dated as of December 30, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.35	Fifth Amendment to Amended and Restated Credit Agreement dated effective as of June 1, 2009 by and among ION Geophysical Corporation, ION International S.à r.l., certain other foreign and domestic subsidiaries of the ION Geophysical Corporation, HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, Citibank, N.A., as syndication agent, and the

	lenders party thereto, filed on August 6, 2009 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
*10.36	Sixth Amendment and Waiver to Amended and Restated Credit Agreement dated effective as of October 23, 2009 by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent.
**10.37	Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. GX Technology Corporation Employment Inducement Stock Option Program, filed on April 4, 2005 as Exhibit 4.1 to the Company s Registration Statement on Form S-8 (Reg. No. 333-123831), and incorporated herein by reference.
**10.38	Consulting Services Agreement dated as of October 19, 2006, by and between GX Technology Corporation and Michael K. Lambert, filed on October 24, 2006 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.39	First Amendment to Consulting Services Agreement dated as of January 5, 2007, by and between GX Technology Corporation and Michael K. Lambert, filed on January 8, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.40	Letter agreement dated October 19, 2006, by and between the Company and Michael K. Lambert, filed on October 24, 2006 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.41	Severance Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.42	Consulting Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.43	Rights Agreement, dated as of December 30, 2008, between ION Geophysical Corporation and Computershare Trust Company, N.A., as Rights Agent, filed as Exhibit 4.1 to the Company s Form 8-A (Registration No. 001-12691) and incorporated herein by reference.
10.44	Amended and Restated Share Purchase Agreement, dated as of September 17, 2008, by and among ION Geophysical Corporation, Aram Systems Ltd., Canadian Seismic Rentals Inc. and the Sellers party thereto, filed on September 23, 2008 as Exhibit 2.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.45	Assignment Agreement dated as of December 30, 2008 by and among 3226509 Nova Scotia Company, ARAM Systems Ltd., Canadian Seismic Rentals Inc., Maison Mazel Ltd. and ION Geophysical Corporation, filed on January 5, 2009 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.

10.46	Release Agreement dated as of December 30, 2008 by and among ION Geophysical Corporation, 3226509 Nova Scotia Company, ARAM Systems Ltd., Canadian Seismic Rentals Inc., Maison Mazel Ltd. and the Sellers party thereto, filed on January 5, 2009 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
10.47	Amended and Restated Subordinated Promissory Note dated December 30, 2008, made by 3226509 Nova Scotia Company in favor of Maison Mazel Ltd., filed on January 5, 2009 as Exhibit 10.6 to the Company s Current Report on Form 8-K and incorporated herein by reference.
***10.48	ION Stock Appreciation Rights Plan dated November 17, 2008.
10.49	Form of Purchase Agreement dated as of June 1, 2009, for the offering and sale of 18,500,000 shares of common stock of ION Geophysical Corporation in privately-negotiated transactions to accredited investors (as defined in Rule 501 under the Securities Act of 1933, as amended), by and between ION Geophysical Corporation and the Purchasers named therein, filed on August 6, 2009 as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
10.50	Canadian Master Loan and Security Agreement dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Rentals Corporation, a Nova Scotia corporation, filed on August 6, 2009 as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
10.51	Master Loan and Security Agreement (U.S.) dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Seismic Rentals, Inc., a Texas corporation, filed on August 6, 2009 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

*10.52	Term Sheet dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*10.53	Warrant Issuance Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*10.54	Registration Rights Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*21.1	Subsidiaries of the Company.
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
*24.1	Power of Attorney (included on the signature page of the Form 10-K filed on March 1, 2010).
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. §1350.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. §1350.

* Filed with ION s Annual Report on Form 10-K for the year ended December 31, 2009, as filed with the Securities and Exchange Commission on March 1, 2010.

** Management contract or compensatory plan or arrangement.

Filed herewith

(b) *Exhibits required by Item 601 of Regulation S-K.*

Reference is made to subparagraph (a) (3) of this Item 15, which is incorporated herein by reference.

(c) *Not applicable.*

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on July 9, 2010.

ION GEOPHYSICAL CORPORATION

By /s/ R. Brian Hanson
R. Brian Hanson
Executive Vice President and Chief Financial Officer

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EXHIBIT INDEX

3.1	Restated Certificate of Incorporation dated September 24, 2007 filed on September 24, 2007 as Exhibit 3.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.
3.2	Amended and Restated Bylaws of ION Geophysical Corporation filed on September 24, 2007 as Exhibit 3.5 to the Company s Current Report on Form 8-K and incorporated herein by reference.
3.3	Certificate of Ownership and Merger merging ION Geophysical Corporation with and into Input/Output, Inc. dated September 21, 2007, filed on September 24, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.1	Certificate of Rights and Designations of Series D-1 Cumulative Convertible Preferred Stock, dated February 16, 2005 and filed on February 17, 2005 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.2	Certificate of Elimination of Series B Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.3	Certificate of Elimination of Series C Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.4	Certificate of Designation of Series D-2 Cumulative Convertible Preferred Stock dated December 6, 2007, filed on December 6, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.5	Certificate of Designation of Series D-3 Cumulative Convertible Preferred Stock dated February 20, 2008, filed on February 22, 2008 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.6	Certificate of Designations of Series A Junior Participating Preferred Stock of ION Geophysical Corporation effective as of December 31, 2008, filed on January 5, 2009 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
4.7	Form of Senior Indenture, filed on December 19, 2008 as Exhibit 4.3 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.8	Form of Senior Note, filed on December 19, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.9	Form of Subordinated Indenture, filed on December 19, 2008 as Exhibit 4.5 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
4.10	Form of Subordinated Note, filed on December 19, 2008 as Exhibit 4.6 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by

	reference.
4.11	Warrant to Purchase Shares of the Common Stock of ION Geophysical Corporation dated October 27, 2009, issued by ION Geophysical Corporation to BGP Inc., China National Petroleum Corporation, filed on October 29, 2009 as Exhibit 4.1 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.
4.12	Convertible Promissory Note, dated October 23, 2009, issued by ION Geophysical Corporation to the Bank of China, New York Branch, filed on October 29, 2009 as Exhibit 4.2 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.
4.13	Convertible Promissory Note, dated October 23, 2009, issued by ION International S.à r.l. to the Bank of China, New York Branch, filed on October 29, 2009 as Exhibit 4.3 to the Company s Current Report on Form 8-K/A and incorporated herein by reference.

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**10.1	Amended and Restated 1990 Stock Option Plan, filed on June 9, 1999 as Exhibit 4.2 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
10.2	Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park II, LP as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.2 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
10.3	Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park District as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.3 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
**10.4	Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan, filed on June 9, 1999 as Exhibit 4.3 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
**10.5	Amendment No. 1 to the Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan dated September 13, 1999 filed on November 14, 1999 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 1999 and incorporated herein by reference.
**10.6	Employment Agreement dated effective as of May 22, 2006 between Input/Output, Inc. and R. Brian Hanson, filed on May 1, 2006 as Exhibit 10.1 to the Company s Form 8-K, and incorporated herein by reference.
**10.7	First Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and R. Brian Hanson, filed on August 21, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
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*10.36	Sixth Amendment and Waiver to Amended and Restated Credit Agreement dated effective as of October 23, 2009 by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent.
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10.49	Form of Purchase Agreement dated as of June 1, 2009, for the offering and sale of 18,500,000 shares of common stock of ION Geophysical Corporation in privately-negotiated transactions to accredited investors (as defined in Rule 501 under the Securities Act of 1933, as amended), by and between ION Geophysical Corporation and the Purchasers named therein, filed on August 6, 2009 as Exhibit 10.2 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
10.50	Canadian Master Loan and Security Agreement dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Rentals Corporation, a Nova Scotia corporation, filed on August 6, 2009 as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
10.51	Master Loan and Security Agreement (U.S.) dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Seismic Rentals, Inc., a Texas corporation, filed on August 6, 2009 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

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*10.52	Term Sheet dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*10.53	Warrant Issuance Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*10.54	Registration Rights Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation.
*21.1	Subsidiaries of the Company.
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
*24.1	Power of Attorney (included on the signature page of the Form 10-K filed on March 1, 2010).
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. §1350.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. §1350.

* Filed with ION s Annual Report on Form 10-K for the year ended December 31, 2009, as filed with the Securities and Exchange Commission on March 1, 2010.

** Management contract or compensatory plan or arrangement.

Filed herewith