ISCO INTERNATIONAL INC
Form 10-K
March 30, 2007

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

for the fiscal year ended December 31, 2006

or

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

for the transition period from ______ to ______

Commission File Number 001-22302

ISCO INTERNATIONAL, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	36-3688459 (I.R.S. Employer Identification No.)
1001 Cambridge Drive Elk Grove Village, Illinois (Address of principal executive offices)	60007 (Zip Code)

Registrant's telephone number, including area code: (847) 391-9400

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

Common Stock, Par Value $0.001 Per Share	**American Stock Exchange**
(Title of each class)	**(Name of each exchange on which registered)**

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

None
(Title of class)

None
(Title of class)

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

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

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 x No ¨

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 the definitive proxy or information statements incorporated by reference in Part III of this on Form 10-K or any amendment to this on Form 10-K. ¨

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

Large accelerated filer ¨ Accelerated filer ¨
Non-accelerated filer x

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

As of June 30, 2006, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $32.3 million based on the last sale price of the common stock on such date as reported on the American Stock Exchange. This calculation excludes more than 88 million shares held by directors, executive officers, and two holders of more than 10% of the registrant's common stock.

As of March 1, 2007, there were 190,388,033 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

As stated in Part III of this Annual Report on Form 10-K, portions of the registrant's definitive proxy statement for the registrant's 2007 Annual Meeting of Stockholders to be held on June 8, 2007 are incorporated by reference in Part III of this Annual Report on Form 10-K.

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FORWARD- LOOKING STATEMENTS

Because we want to provide investors with more meaningful and useful information, this Annual Report on Form 10-K ("Form 10-K") contains, and incorporates by reference, certain forward-looking statements that reflect our current expectations regarding its future results of operations, performance and achievements. We have tried, wherever possible, to identify these forward-looking statements by using words such as "anticipates," "believes," "estimates," "expects," "designs," "plans," "intends," "looks," "may," and similar expressions. These statements reflect our current beliefs and are bas on information currently available to us. Accordingly, these statements are subject to certain risks, uncertainties and contingencies, including the factors set forth under Item 1A, Risk Factors, which could cause our actual results, performance or achievements for 2007 and beyond to differ materially from those expressed in, or implied by, any of these statements. You should not place undue reliance on any forward-looking statements. Except as otherwise required by federal securities laws, we undertake no obligation to release publicly the results of any revisions to any such forward-looking statements that may be made to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect the occurrence of unanticipated events.

PART I

Item 1. Business

HISTORY

We were founded in 1989 by ARCH Development Corporation, an affiliate of the University of Chicago, to commercialize superconductor technologies initially developed by Argonne National Laboratory. We were incorporated as Illinois Superconductor Corporation in Illinois on October 18, 1989 and reincorporated in Delaware on September 24, 1993. In 2001, we shifted our focus from solely a superconductive filter (high-temperature superconductor product line referred to as "HTS") provider to a customer-driven provider of more specialized Radio Frequency ("RF") management solutions, with a particular focus on interference management, changing our name to ISCO International, Inc. We continue to broaden our solutions with an increasingly comprehensive approach toward optimization of the full radio link of a number of diverse wireless networks. Our facilities and principal executive offices are located at 1001 Cambridge Drive, Elk Grove Village, Illinois 60007 and our telephone number is (847) 391-9400. We maintain a website at *http://www.iscointl.com*. The information contained therein is not incorporated into this annual report.

BUSINESS STRATEGY

Our strategic goal is to become the leading supplier of RF management solutions to wireless operators. We seek to accomplish our goal by:

- Marketing our products aggressively to leading wireless operators;
- Providing customers comprehensive radio link management infrastructure-based solutions for wireless networks;
- Continuing to build on our strong intellectual property position selectively, emphasizing speed to market; and
- Outsourcing product manufacturing and reducing product cost.

We focus on winning the support of the world's leading wireless operators for our RF management solutions. We believe that our ANF and RF² product families, as well as professional service support and other products, make us a preeminent RF management specialist in the market. We have taken steps to expand into a digital delivery platform for our ANF technologies, and expect this trend to continue. We believe that the ability to solve interference problems using the delivery size, capabilities and cost benefits of a digital platform will greatly enhance our addressable market within the field of wireless telecommunications.

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We currently outsource production of our products. We believe that this model will allow us to maintain or achieve targeted product gross margins, minimize capital needs while reducing product costs, and maintain a very high quality level. We also believe that offering the lowest product cost will further strengthen our ability to achieve our strategic objectives.

RF MANAGEMENT ISSUES, INCLUDING INTERFERENCE, AND WIRELESS SYSTEMS

RF management issues are a growing problem limiting cell site coverage, capacity and range, as well as mobile transmit power and related battery-life issues. RF Link (or "Link") problems cause dropped calls, poor call quality, and other service problems that lead to subscriber dissatisfaction and turnover (churn). Interference enters a carrier's operating frequencies from such sources as: home electronic devices including portable phones, two-way radios used by commercial enterprises and governmental agencies, air-to-ground radio, police, fire and emergency services radio, military radio, wireless data networking systems, television and radio broadcasts, radar and other cellular networks. Interference is also created by electrical sources used to power cellular base station equipment. Interference may begin within a particular frequency or migrate from another frequency. Increased usage of co-location (multiple providers and/or multiple architectures from a single vendor using the same towers), increased sensitivity of non-voice applications, and the continued surge in wireless traffic result in increasing the impact of interference on wireless networks. With the proliferation of data applications and the limitations on tower availability and related budgets, wireless operators are finding that their own preferred technology combinations for their cell sites are creating interference with each other. Wireless operators also create self interference during the planned re-mining of existing spectrum with 3G/4G broadband technologies.

We believe the proliferation of wireless devices and high data rate services will exacerbate the amount of interference bombarding carriers' operating frequencies. Conventional cellular base station equipment does not effectively cope with interference issues. More importantly, the wireless telecommunications industry is undergoing significant transformation as it attempts to integrate existing infrastructure and technologies with newer 3G equipment. Additionally, the recent merger activity is forcing merged companies to integrate disparate technology platforms, sometimes using two and three different architectures in the same site in order to handle planned traffic. We believe this trend will continue. Our products are designed to address this expanding market need.

In the face of expanding subscriber bases, increased minutes of cell phone use, demand for high data rate services, the ease of customer churn (changing providers) due to number portability, restricted capital budgets and intense competition, the provisioning and optimization of wireless system infrastructure is a major challenge for operators. As a result of these industry conditions, wireless equipment manufacturers, including independent wireless technology companies and large original equipment manufacturers (OEM's) are working intensely to develop technologies that provide operators the tools necessary to monetize the growing demand for wireless services.

Using our solutions to tightly integrate disparate technologies while simultaneously optimizing the radio link, including the mitigation of interference, operators can capture additional capacity and utilization, expand cell site range and coverage, reduce dropped calls, and significantly improve overall call quality. High speed data applications have placed a tremendous additional strain on wireless networks. Higher data rates require much cleaner signals than traditional voice-oriented networks to support the data throughput required for many of the highest average revenue per unit applications (including VoIP, music, television and video). As a result, we believe the value proposition and payback of our solutions are improving with increasing demand for high speed data, which we believe will result in increased demand for our solutions. Network capacity, quality and throughput are today the critical competitive differentiators in commercial wireless networks. All of our products improve one or more of these performance factors.

We estimate the economic payback to operators as a result of the use of our solutions should typically occur in less than one year, sometimes well under one year, depending on traffic levels and overall link quality. We believe our solutions often present the best overall value of all alternatives available in many applications.

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Target Market

We believe demand for our products will be primarily driven by the following factors:

1. Existing networks are straining under heavy traffic. According to many sources, the annual growth rate in wireless telecommunications is roughly 15-20%. The number of handsets sold during 2006 has been reported to be more than 900 million units worldwide.

2. The ongoing transition from predominantly voice based networks to data based networks will continue to drive demand for infrastructure enhancements to achieve data and error rates required to support near real time data applications (including VoIP, music, television and video).

3. Interference and coverage issues are primary causes of poor call quality, dropped calls and poor data throughput. We believe that as a result of increasing use of devices such as cellular phones, wireless data networking equipment, and wireless consumer appliances, wireless network operators are coming to view interference and coverage management technologies as necessary to protect against their customer bases “churning” to other carriers, especially since the full implementation of number portability (the ability to retain one’s phone number when changing wireless operators - historically a barrier to changing providers).

4. We believe that newer, data-driven wireless networks and expansion into higher frequencies will require smaller operating cells and more base stations than existing cellular networks in order to cover the same geographic area. This is based, in part, on the requirement for a higher quality radio link in order to enable full 3G throughputs required by the most popular applications, as well as inherent limitation of RF transmissions in higher frequencies. High frequency RF signals require more transmission points for equivalent coverage than signals of lower frequency. Since most 3G technologies are deployed at high frequencies, an operator has to add a significant number of additional cells to match coverage and in-building penetration capabilities they achieved with their 2G deployments. To minimize the capital investment and maximize the performance and customer satisfaction of their data-driven networks, operators are compelled to look at technology options to overcome these inherent obstacles.

5. The wireless telecommunications industry is undergoing significant transformation due to industry consolidation. The primary competitive driver is to reduce the cost bases, both capital and recurring costs, mostly achieved by reducing the number of cells required to support the combined customer base and to increase penetration such as by providing better in-building coverage. This creates demanding requirements to integrate disparate technologies, frequency spectrums, and legacy platforms while at the same time enabling the integrations of advanced technologies and services. Our products enable this integration while simultaneously optimizing the RF performance of the overall system.

In summary, we believe we have differentiated technologies in radio link management and optimization and are customer-driven to closely align our solutions to their specific needs thereby maximizing our value-add to our customers. Our goal is to continue to position ourselves as a leader in this segment of the wireless industry.

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TECHNOLOGY OVERVIEW

A wireless base station is roughly divided into two halves: the digital portion and the so-called "RF" portion.

Our core expertise is the application of technology and experience to RF systems, though we are beginning to implement RF solutions utilizing digital technologies. The components in the receiver front-end are designed to acquire the desired information-bearing signal and pass it through to the digital portion of the system, where it is processed digitally and the user information is extracted. Typically, a portion of the signal is lost as it passes through the RF components. Further, undesired interference (in band and out of band) also leaks into the system due to imperfections in the characteristics of the RF devices.

The use of our solutions for wireless RF systems is based on creating RF systems which block or mitigate the impact of interference, optimize signal processing within the radio path while introducing very little signal loss or degradation.

Our two current primary product families are: (i) Adaptive Notch Filter (ANF ™), which dynamically and adaptively identifies and eliminates direct in-band interference in the radio link of a wide-band system such as CDMA or UMTS; (ii) Radio Link Radio Frequency Fidelity (RF² ™), which includes ultra linear low-noise amplifier receivers, multi-couplers, filters and duplexers that enable full and integrated upgrades of legacy systems to 3G technologies resulting in a significant overall improvement in system performance, such as both dropped calls and increased data throughput. These products are designed for efficient production, emphasizing solid-state electronics over mechanical devices with moving parts.

RF² (Radio link Radio Frequency Fidelity)

We introduced our RF² products in September 2003, we began to add new products to our RF² family in 2004, and added a significant number of products in 2005 and 2006. The RF² product family is comprised of solutions that focus on optimizing RF handling in order to improve system performance, integrate the disparate technologies utilized by operators, and enable next generation 3G upgrades. The RF² product family is designed to improve capacity and coverage in cellular base stations through state of the art low noise RF amplification, filtering, and combining and integration technologies.

The basic RF² product is a radio link solution designed and priced for network-wide deployment, improving system coverage integrity, in-building penetration, and voice/data capacity. This leads to improvement in wireless user perceived quality by reducing failed connection attempts and dropped calls, and improving handset battery life.

Our RF² products are easy to install, maintenance-free, and often present a performance benefit over alternative solutions in terms of tighter integration into/with existing equipment, continued ability to utilize diagnostics and monitoring equipment, and higher performance. Additionally, our RF² solutions have been shown to deliver results generally comparable to HTS-based solutions without a cryogenic cooler or other moving parts, and with a tighter integration and much lower cost. We believe that the ease of integration and higher value compete strongly with other solutions.

RF² Competition

OEM competition includes solutions such as adding a carrier to the cell sites (to increase capacity), cell splitting, or even adding an entirely new base station so as to add capacity and coverage. After-market competition includes repeaters, TMA's (tower-mounted amplifiers), GMA's (ground-mounted amplifiers) and HTS receiver front ends, as

well as duplexers and other non-integrated solutions. We believe these products may generally improve the coverage of the network, but lack the value of our fully integrated link management solutions.

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Adaptive Notch Filters

Our patented ANF system identifies and suppresses in-band interference in the radio link of a wide-band system such as CDMA or UMTS. If interference is not eliminated, the radio link of the system may be reduced, possibly to the point of not allowing any calls on the entire channel. The ANF unit continuously monitors the power spectral density across the carriers in use and identifies narrow-band interference. The severity of multiple in-band interferers is prioritized, and through software control, the ANF unit dynamically inserts a highly selective filter to eliminate multiple interferers with minimal impact on the desired broadband signal. The objective of the ANF system is for operators to realize significant gains in performance in coverage, capacity and data throughput. An entire network of ANF hardware can be managed via the web-based management software that supports the hardware. We believe our patented ANF technology is the only in-band dynamically controlled interference management solution commercially available to the marketplace today.

Our products, including projected expansions, are focused on CDMA and other wide-band spread spectrum systems (W-CDMA), including, for example, upgrades of GSM systems to UMTS and similar 3G technology. During 2006 we launched our first ANF solution that protects PCS (1900 MHz). We empowered this and other ANF platforms with a digital front end and modular design for easy adaptation to customer requirements. This new platform has significantly expanded our addressable market and will also serve as an enabler to a larger suite of dynamically adaptable RF multiplexer solutions.

We have also developed a network-wide, web-based network management tool (web monitor), allowing our customers to perform management functions for all ANF units throughout the system. This tool with a graphical user interface allows the service provider to control, configure, and monitor the ANF units remotely from the network management center. This includes:

- Remote configuration of parameters within all ANF units;
- Remote monitoring of alarm status for all ANF units;
- Observation of interference and notch activity from all units; and
- The ability to view on-line event data and reports based on measured performance data.

We have industry leading expertise in the optimization of networks. To facilitate rapid penetration of ANF, we offer professional services to the service providers' engineering teams to identify and quantify interference, and, its effects on network performance. We have developed several custom software and hardware tools to perform interference analysis and interference audit. iSMART (Interference from System Metric Analysis Rules Tool) is a software tool that enables a service provider to identify potential ANF candidate sectors/cell sites by analyzing the system performance metrics data generated in their network. Automated Test Equipment, ANF-on-wheels and ANF Web Monitor is a software/hardware system that allows us to perform interference audits at cell sites of service providers regardless of the frequency band of operation. This service helps quantify interference and identify new markets (frequency bands) with high interference.

We have recently added a digital front-end to our ANF products, and are working on a fully digital version that we expect to complete during 2007. We believe a fully digital ANF solution would integrate well into operator plans and provide the economics to allow far greater penetration into customer networks, as well as access to wireless applications outside of traditional cellular (e.g., WiFi and WiMax architectures), as well as mobile devices such as handsets.

ANF competition

We believe our patented ANF technology is the only in-band dynamically controlled interference management solution commercially available to the marketplace today. We hold proprietary technology on ANF. We do, however, face competition as described below.

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Direct Competition — After-Market Vendors

Fixed-frequency notch filters are the main form of direct competition. However, these will only work in a static interference environment, and hence do not satisfy the need of dynamic interference detection and elimination as observed in a vast majority of in-band interference scenarios. Smart antennas were also developed with the intent of in-band interference mitigation. However, we believe these solutions have limited applicability and effectiveness in eliminating in-band interference, particularly in a CDMA-based network, and are typically substantially more expensive (in addition to being less effective) than our ANF solution.

Direct Competition — OEMs

Digital-signal-processing based solutions may be under development by the various OEMs. Even if the manufacturers do develop such a solution for in-band interference, we believe that they would have limited dynamic range and hence would only be able to mitigate low-power interference. Most importantly they would likely not be available for deployment on the hundreds of thousands of legacy cell sites currently in service.

Indirect Competition — OEMs

Indirect competition does not directly address the problem of in-band interference, but could be viewed as a method for circumventing the problem. Examples include adding a carrier to a cell site (to increase capacity), cell splitting, or even adding an entirely new base station. These methods seek to overcome the effects of the interference by a brute force of added capacity and higher signal-to-noise in a problematic location. However, we believe these solutions to be relatively costly and do not guarantee adequate increased performance due to absolute limiting effects of in-band interference in certain situations.

Indirect Competition — After-Market Vendors

Other forms of indirect competition include repeaters, TMA's, and HTS receiver front ends. As with the OEM-based solutions, we do not believe these directly address the problem of in-band interference. There are several entities attempting to develop and market digital solutions that address part of the problem that our ANF solutions address, but we believe they operate in a very different fashion and will not achieve the same benefits. Additionally, they are typically entities without significant current revenue streams or operator access. We have the benefit of a growing existing customer base and the ability to work with our customers in tightly matching next generation solutions with their needs.

Product Benefits

Our products are designed to address the high performance RF needs of domestic and international commercial wireless telecommunication systems by providing the following advantages:

Enable Deployment of Data Networks. Beginning in 2005, our solutions have been utilized with data network deployments. These deployments require upgrades and changes to existing infrastructure. Our products have proven effective in helping customers in this area. It is generally expected that data networks will continue to be widely deployed, in the United States and internationally, during 2006 and beyond.

Technology Integration due to Expansion or Consolidation. The wireless telecommunications industry is undergoing significant transformation due to industry consolidation. The primary competitive driver is to reduce the cost bases, both capital and reoccurring costs, mostly achieved by reducing the number of cells required to support the combined

customer base. This creates demanding requirements to integrate disparate technologies, frequency spectrums, and legacy platforms while at the same time enabling the integrations of advanced technologies and services. Our products enable this integration while simultaneously optimizing the RF performance of the overall system.

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Greater Network Capacity and Utilization. Our solutions can increase capacity and utilization by up to 70% or more. In some cases, capacity increases because channels which were previously unusable due to interference are recovered. In other cases, system utilization increases because of lower levels of blocked or dropped calls, and increases in the ability of the system to permit weak signals to be processed with acceptable call quality.

Improved Base Station Range. Our RF systems have been shown to extend the radio link range of a wireless system by up to 50%. Greater range can reduce a service operator's capital expenditure per customer in lower density areas by filling in coverage gaps in existing systems or by reducing the number of required cell sites for new system deployments.

Improved Flexibility in Locating Base Stations. Our RF products can allow wireless telecommunications service providers to co-locate base stations near other RF transmitters. Our products allow the cell site radio to better tolerate RF interference while reducing out-of band signals that could interfere with other nearby wireless telecommunication operators.

Improved Call Quality - Fewer Dropped Calls and Failed Connection Attempts. Our products improve call quality by reducing dropped and blocked calls. During commercial installations, our RF products have demonstrated drastic reduction in dropped calls, by as much as 50% or more. Our products similarly reduce the number of ineffective connection attempts and dead zones within networks.

Reduced Mobile Transmit Power. By improving the radio link, reducing the system's noise floor and mitigating the destructive impact of interference, our solutions greatly reduce required mobile transmit power. This improves battery life, among other benefits.

COMPANY HIGHLIGHTS

Sales and Marketing

We have historically focused our sales and marketing effort on U.S. wireless service providers for retrofit applications. To date, we have sold our products to many of the largest cellular operators in the United States as well as to mid-size and smaller U.S. wireless operators.

We have targeted certain international customers, marketing both our existing products and presenting the benefits of our interference-management technology in the design and early stage deployments of new systems. Targeted regions have included China and other parts of the Far East as well as several countries within Latin America and Europe. We have engaged professional representatives in these areas to facilitate entry into the markets and follow-on services. Such representatives typically help by providing customer contacts and relationships, in marketing, field support, and distribution.

Sales to three customers accounted for 98%, 97%, and 94% of our total revenues for 2006, 2005 and 2004, respectively. During 2006, the top three customers were Verizon Wireless, Alltel Corporation, and Bluegrass Cellular Corporation, respectively. In addition, a significant amount of our technical and managerial resources have been focused on working with these and a limited number of other operators and OEMs. Our sales, in dollars, to non-"top three" customers during 2006 was similar to the 2005 amount, reflecting additional penetration in our largest customers offsetting the continued expansion in our customer base.

Manufacturing

We outsource our manufacturing processes in order to provide predictable product yields and easy expansion to meet increased customer demand. Toward that end, we currently produce all of our products through third party manufacturers. We believe there are multiple sources available for manufacturing and foresee no problem continuing to apply our outsourcing strategy. Our internal manufacturing and test capability can be found in Elk Grove Village, IL.

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Research and Development

Our R&D efforts have been focused on developing and improving RF products for wireless telecommunications systems. As a result of such efforts, product performance has been improved, product size has been reduced, production costs have been lowered, product functionality has been increased, and product packaging has been streamlined. We are currently developing related products that are synergistic with our core offerings and which utilize our core technical competencies in the radio link management arena, allowing us to deliver our solutions to more customers.

Our total R&D expenses during 2006, 2005 and 2004 were approximately $2,012,000, $1,767,000, and $1,119,000, respectively.

Intellectual Property and Patents

We regard certain elements of our product design, fabrication technology and manufacturing process as proprietary and protect our rights in them through a combination of patents, trade secrets and non-disclosure agreements. We also have obtained exclusive and non-exclusive licenses for technology developed with or by our research partners, which have included Argonne National Laboratory and Northwestern University. We believe that our success will depend in part upon the protection of our proprietary information, our patents and licenses of key technologies from third parties, and our ability to operate without infringing on the proprietary rights of others.

HTS Technology

We spent many years developing HTS applications, resulting in a number of products, processes and materials related to HTS. This experience has helped us offer our current set of state of the art solid-state solutions, such that the underlying technology is being utilized in the marketplace today and may be even more fully utilized in the future.

There are two ways of designing an HTS component - “thin-film” and “thick-film” techniques. We have technologies in both aspects that may have application to specific, but currently limited markets. We are prepared to address those segments should the opportunity present itself, but currently have chosen to focus on higher value-added, solid state solutions appropriate for the wireless telecommunications application.

Patents

We have applied for patents for inventions developed internally and acquired patents, through assignment of a license from the Canadian government, in connection with the purchase of the Adaptive Notch Filtering business unit of Lockheed Martin Canada. One of our patents is jointly owned with Lucent Technologies, Inc. Furthermore, we expect to pursue foreign patent rights on certain inventions and technologies critical to our products. Please refer to Note 2 of our Financial Statements for a discussion of patent useful lives and amortization.

Government Regulations

Although we believe that our wireless telecommunications products themselves are not licensed or governed by approval requirements of the Federal Communications Commission (“FCC”), the operation of base stations is subject to FCC licensing and the radio equipment into which our products would be incorporated is subject to FCC approval. Base stations and the equipment marketed for use therein must meet specified technical standards. Our ability to sell our RF products is dependent on the ability of wireless base station equipment manufacturers and of wireless base station operators to obtain and retain the necessary FCC approvals and licenses. In order to be acceptable to base

station equipment manufacturers and to base station operators, the characteristics, quality, and reliability of our base station products must enable them to meet FCC technical standards.

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We may use certain hazardous materials in our research, development and any manufacturing operations. As a result, we may be subject to stringent federal, state and local regulations governing the storage, use and disposal of such materials. It is possible that current or future laws and regulations could require us to make substantial expenditures for preventive or remedial action, reduction of chemical exposure, or waste treatment or disposal. We believe we are in material compliance with all environmental regulations and to date we have not had to incur significant expenditures for preventive or remedial action with respect to the use of hazardous materials.

Employees

As of January 19, 2007, we had a total of 39 employees, 13 of whom hold advanced degrees. Of the employees, 5 are engaged in manufacturing and production, 17 are engaged in research, development and engineering, and 11 are engaged in marketing and sales, and 6 are engaged in finance and administration. We also periodically employ other consultants and independent contractors on as as-needed basis. None of our employees are covered by a collective bargaining agreement. We believe that our relationship with our employees is good.

Item 1A. Risk Factors

The following factors, in addition to other information contained herein, should be considered carefully in evaluating us and our business.

RISKS RELATED TO THE OPERATIONS AND FINANCING OF THE COMPANY

We have a history of losses that raises doubts about our ability to continue as a going concern

We were founded in October 1989 and through 1996 we were engaged principally in research and development, product testing, manufacturing, marketing and sales activities. Since 1996, we have been actively selling products to the marketplace and we continue to develop new products for sale. We have incurred net losses since inception. As of December 31, 2006, our accumulated deficit was approximately $164 million. We have only recently begun to generate revenues from the sale of our ANF and RF^2 products, having sold more in the past two years than in the fourteen years of company history prior to 2005. Accordingly, although we showed a substantial improvement in revenues and we have indicated the expectation of continued improvement during 2007, it is nonetheless possible that we may continue to experience net losses and cannot be certain if or when we will become profitable.

These conditions raise substantial doubt about our ability to continue as a going concern. The accompanying consolidated financial statements have been prepared assuming we will continue as a going concern and do not include any adjustments relating to the recoverability of reported assets or liabilities should we be unable to continue as a going concern.

If we fail to obtain necessary funds for our operations, we may be unable to maintain or improve on our technology position and unable to develop and commercialize our products

To date, we have financed our operations primarily through public and private equity and debt financings, and most recently through several financings with affiliates of our two largest shareholders. We believe that we have sufficient funds to operate our business until $11.3 million of our debt becomes due in August 2007. That debt is held by our two largest shareholders, including affiliates. While we expect to refinance this debt no such refinancing has occurred as of the reporting date, therefore, the ability to refinance our debt and maintain adequate working capital is necessary for us to continue as a going concern. Additionally, we project increases in working capital requirements in order to pursue significant business opportunities during 2007 and beyond, and also expect to spend additional financial resources in the expansion of our business and product offering. As such, we may require additional capital prior to

August 2007. We intend to look into augmenting our existing capital position by continuing to evaluate potential short-term and long-term sources of capital whether from debt, equity, hybrid, or other methods. The primary covenant in our existing debt arrangement involves the right of the lenders to receive debt repayment from the proceeds of new financing activities. This covenant may restrict our ability to obtain new sources of financing and/or to apply the proceeds of a financing event toward operations until the debt is repaid in full.

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Our continued existence is therefore dependent upon our continued ability to raise funds through the issuance of our equity securities or borrowings. Our plans in this regard are to obtain other debt and equity financing until such time as profitable operation and positive cash flow are achieved and maintained. Although we believe, based on the fact that we have raised funds through sales of common stock and from borrowings over the past several years, that we will be able to secure suitable additional financing for our operations, there can be no guarantee that such financing will continue to be available on reasonable terms, or at all. As a result, there is no assurance that we will be able to continue as a going concern.

The actual amount of future funding requirements will depend on many factors, including: the amount and timing of future revenues, the level of product marketing and sales efforts to support our commercialization plans, the magnitude of research and product development programs, the ability to improve or maintain product margins, any merger and acquisition activity, and the costs involved in protecting patents or other intellectual property.

We have limited experience in manufacturing, sales and marketing and dependence on third party manufacturers

For us to be financially successful, we must either manufacture our products in substantial quantities, at acceptable costs and on a timely basis or enter into outsourcing arrangements with qualified manufacturers that will allow us the same result. Currently, our manufacturing requirements are met by third party contract manufacturers. The efficient operation of our business will depend, in part, on our ability to have these and other companies manufacture our products in a timely manner, cost-effectively and in sufficient volumes while maintaining the required quality. Any manufacturing disruption could impair our ability to fulfill orders and could cause us to lose customers.

In the event that we are unable to maintain manufacturing arrangements on acceptable terms with qualified manufacturers then we would have to produce our products in commercial quantities in our own facilities. Although to date we have produced limited quantities of our products for commercial installations and for use in development and customer field trial programs, production of large quantities of our products at competitive costs presents a number of technological and engineering challenges. We may be unable to manufacture such products in sufficient volume. We have limited experience in manufacturing, and substantial costs and expenses may be incurred in connection with attempts to manufacture larger quantities of our products. We may be unable to make the transition to large-scale commercial production successfully.

Our sales and marketing experience to date is very limited. We may be required to further develop our marketing and sales force in order to effectively demonstrate the advantages of our products over other products. We also may elect to enter into arrangements with third parties regarding the commercialization and marketing of our products. If we enter into such agreements or relationships, we would be substantially dependent upon the efforts of others in deriving commercial benefits from our products. We may be unable to establish adequate sales and distribution capabilities, we may be unable to enter into marketing arrangements or relationships with third parties on financially acceptable terms, and any such third party may not be successful in marketing our products. There is no guarantee that our sales and marketing efforts will be successful.

Management of our growth

Growth may cause a significant strain on our management, operational, financial and other resources. The ability to manage growth effectively may require us to implement and improve our operational, financial, manufacturing and management information systems and expand, train, manage and motivate employees. These demands may require the addition of new management personnel and the development of additional expertise by management. Any increase in

resources devoted to product development and marketing and sales efforts could have an adverse effect on financial performance in future fiscal quarters. If we were to receive substantial orders, we may have to expand current facilities, which could cause an additional strain on our management personnel and development resources. The failure of the management team to effectively manage growth could have a material adverse effect on our business, operating results and financial condition.

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RISKS RELATED TO OUR COMMON STOCK AND CHARTER PROVISIONS

Volatility of common stock price

The market price of our common stock, like that of many other high-technology companies, has fluctuated significantly and is likely to continue to fluctuate in the future. Since January 1, 2005 and through December 31, 2006, the closing price of our common stock has ranged from a low of $0.25 per share and high of $0.46 per share. Announcements by us or others regarding the receipt of customer orders, quarterly variations in operating results, acquisitions or divestitures, additional equity or debt financings, results of customer field trials, scientific discoveries, technological innovations, litigation, product developments, patent or proprietary rights, government regulation and general market conditions may have a significant impact on the market price of our common stock. In addition, fluctuations in the price of our common stock could affect our ability to maintain the listing of our common stock on the American Stock Exchange.

Risk of dilution

As of December 31, 2006, we had outstanding options to purchase 4.9 million shares of common stock at a weighted average exercise price of $0.41 per share (fewer than 0.1 million of which have not yet vested) issued to employees, directors and consultants pursuant to the 2003 Equity Incentive Plan and its predecessor 1993 Stock Option Plan, as amended, the merger agreement with Spectral Solutions, and individual agreements with management and directors. In addition, on the same date we had 8.7 million unvested shares of restricted stock outstanding. In order to attract and retain key personnel, we may issue additional securities, including grants of restricted shares, in connection with or outside our company employee benefit plans, or may lower the price of existing stock options.

The exercise of options and warrants for common stock and the issuance of additional shares of common stock, shares of restricted stock and/or rights to purchase common stock at prices below market value would be dilutive to existing stockholders and may have an adverse effect on the market value of our common stock.

Concentration of our stock ownership

At the time of this filing, officers, directors and principal stockholders (holding greater than 5% of outstanding shares) together control approximately 50% of the outstanding voting power on a fully diluted basis. The two largest stockholders, along with their affiliates, are also our lenders, holding all of our outstanding debt instruments. Consequently, these stockholders, if they act together, would be able to exert significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change of control of us, even if such a change may be in the best interests of our stockholders. The interests of these stockholders may not always coincide with our interests or the interests of other stockholders. Accordingly, these stockholders could cause us to enter into transactions or agreements that we would not otherwise consider.

Certain provisions in our charter documents have an anti-takeover effect

There exist certain mechanisms that may delay, defer or prevent such a change of control. For instance, our Certificate of Incorporation and By-Laws provide that (i) our Board of Directors has authority to issue series of our preferred stock with such voting rights and other powers as the Board of Directors may determine and (ii) prior specified notice must be given by a stockholder making nominations to the Board of Directors or raising business matters at stockholders meetings. The effect of the anti-takeover provisions in our charter documents may be to deter business combination transactions not approved by our Board of Directors, including acquisitions that may offer a premium

over market price to some or all stockholders.

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Reporting requirements of a public company

As a public company, we are required to comply with various reporting obligations. These obligations change from time to time, and currently include full compliance with Section 404 of the Sarbanes-Oxley Act for our fiscal year ending December 31, 2007. The process of achieving full compliance might involve the commitment of significant resources, including substantial levels of management attention. If we fail to comply with the reporting obligations of the Exchange Act and Section 404 of the Sarbanes-Oxley Act, or if we fail to achieve and maintain adequate internal controls over financial reporting, our business, results of operations and financial condition, and investors' confidence in us, could be materially adversely affected.

As a public company, we are required to comply with the periodic reporting obligations of the Exchange Act, including preparing annual reports, quarterly reports and current reports. Our failure to prepare and disclose this information in a timely manner could subject us to penalties under federal securities laws, expose us to lawsuits and restrict our ability to access financing. In addition, we are required under applicable law and regulations to integrate our systems of internal controls over financial reporting. We plan to evaluate our existing internal controls with respect to the standards adopted by the Public Company Accounting Oversight Board. During the course of our evaluation, we may identify areas requiring improvement and may be required to design enhanced processes and controls to address issues identified through this review. This could result in significant delays and cost to us and require us to divert substantial resources, including management time, from other activities.

TECHNOLOGY AND MARKET RISKS

We are dependent on wireless telecommunications

The principal target market for our products is wireless telecommunications. The devotion of substantial resources to the wireless telecommunications market creates vulnerability to adverse changes in this market. Adverse developments in the wireless telecommunications market, which could come from a variety of sources, including future competition, new technologies or regulatory decisions, could affect the competitive position of wireless systems. Any adverse developments in the wireless telecommunications market may have a material adverse effect on our business, operating results and financial condition.

We are dependent on the enhancement of existing networks and the build-out of next-generation networks, and the capital spending patterns of wireless network operators

Increased sales of products are dependent on a number of factors, one of which is the build-out of next generation (3G and 4G) enabled wireless communications networks as well as enhancements of existing infrastructure. Building wireless networks is capital intensive, as is the process of upgrading existing equipment. Further, the capital spending patterns of wireless network operators is beyond management's control and depends on a variety of factors, including access to financing, the status of federal, local and foreign government regulation and deregulation, changing standards for wireless technology, the overall demand for wireless services, competitive pressures and general economic conditions. The build-out of next-generation networks may take years to complete. The magnitude and timing of capital spending by these operators for constructing, rebuilding or upgrading their systems significantly impacts the demand for our products. Any decrease or delay in capital spending patterns in the wireless communication industry, whether because of a general business slowdown or a reevaluation of the prospective demand for data and other services, would delay the build-out of these networks and may significantly harm business prospects.

Our success depends on the market's acceptance of our products

Our RF products, including our ANF and RF² products, have not been sold in very large quantities and a sufficient market may not develop for these products. Customers establish demanding specifications for performance, and although we believe we have met or exceeded these specifications to date, there is no guarantee that the wireless service providers will elect to use these solutions to solve their wireless network problems. Although we have enjoyed substantial revenue growth over the past two years, including the best three revenue quarters in our history during 2006, there is no assurance that we will continue to receive orders from these customers.

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Rapid technological change and future competitive technologies could negatively affect our operations

The field of telecommunications is characterized by rapidly advancing technology. Our success will depend in large part upon our ability to keep pace with advancing our high performance RF technology and efficient, readily available low cost materials technologies. Rapid changes have occurred, and are likely to continue to occur, in the development of wireless telecommunications. Development efforts may be rendered obsolete by the adoption of alternative solutions to current wireless operator problems or by technological advances made by others.

BUSINESS RISKS

Dependence on a limited number of customers

Sales to three customers accounted for 98%, 97%, and 94% of our total revenues for 2006, 2005 and 2004, respectively. During 2006, the top three customers were Verizon Wireless, Alltel Corporation, and Bluegrass Cellular Corporation, respectively. In addition, a significant amount of our technical and managerial resources have been focused on working with these and a limited number of other operators and OEMs. Our sales, in dollars, to non-"top three" customers during 2006 was similar to the 2005 amount, reflecting additional penetration in our largest customers offsetting the continued expansion in our customer base. The loss of any of these large customers might have a material adverse effect on our business, operating result, and financial condition.

We expect that if our products achieve market acceptance, a limited number of wireless service providers and OEMs will account for a substantial portion of revenue during any period. Sales of many of our products depend in significant part upon the decisions of prospective and current customers to adopt and expand their use of these products. Wireless service providers, wireless equipment OEMs and our other customers are significantly larger than we are, and are able to exert a high degree of influence over us. Customers' orders are affected by a variety of factors such as new product introductions, regulatory approvals, end user demand for wireless services, customer budgeting cycles, inventory levels, customer integration requirements, competitive conditions and general economic conditions. The failure to attract new customers would have a material adverse effect on our business, operating results and financial condition.

We have lengthy sales cycles

Prior to selling products to customers, we may be required to undergo lengthy approval and purchase processes. Technical and business evaluation by potential customers can take up to a year or more for products based on new technologies. The length of the approval process is affected by a number of factors, including, among others, the complexity of the product involved, priorities of the customers, budgets and regulatory issues affecting customers. We may not obtain the necessary approvals or ensuing sales of such products may not occur. The length of customers' approval process or delays could make our quarterly revenues and earnings inconsistent and difficult to trend.

We are dependant on limited sources of supply

Certain parts and components used in our RF products are only available from a limited number of sources. Our reliance on these limited source suppliers exposes us to certain risks and uncertainties, including the possibility of a shortage or discontinuation of certain key components and reduced control over delivery schedules, manufacturing capabilities, quality and costs. Any reduced availability of such parts or components when required could materially impair the ability to manufacture and deliver products on a timely basis and result in the cancellation of orders, which could have a material adverse effect on our business, operating results and financial condition.

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In addition, the purchase of certain key components involves long lead times and, in the event of unanticipated increases in demand for our products, we may be unable to manufacture products in quantities sufficient to meet customers' demand in any particular period. We have few guaranteed supply arrangements with our limited source suppliers, do not maintain an extensive inventory of parts or components, and customarily purchase parts and components pursuant to actual or anticipated purchase orders placed from time to time in the ordinary course of business.

Related to this topic, we produce substantially all of our products through third-party contract manufacturers. Like raw materials, the elimination of any of these entities or delays in the fulfillment process, for whatever reason, may impact our ability to fulfill customer orders on a timely basis and may have a material adverse effect on our business, operating results, or financial condition.

To satisfy customer requirements, we may be required to stock certain long lead-time parts and/or finished product in anticipation of future orders, or otherwise commit funds toward future purchase. The failure of such orders to materialize as forecasted could limit resources available for other important purposes or accelerate the requirement for additional funds. In addition, such excess inventory could become obsolete, which would adversely affect financial performance. Business disruption, production shortfalls or financial difficulties of a limited source supplier could materially and adversely affect us by increasing product costs or reducing or eliminating the availability of such parts or components. In such events, the inability to develop alternative sources of supply quickly and on a cost-effective basis could materially impair the ability to manufacture and deliver products on a timely basis and could have a material adverse effect on our business, operating results and financial condition.

Dependence on key personnel

Our success will depend in large part upon our ability to attract and retain highly qualified management, engineering, manufacturing, marketing, sales and R&D personnel. Due to the specialized nature of our business, it may be difficult to locate and hire qualified personnel. The loss of services of one of our executive officers or other key personnel, or the failure to attract and retain other executive officers or key personnel, could have a material adverse effect on our business, operating results and financial condition.

Failure of products to perform properly might result in significant warranty expenses

In general, our products carry a warranty of one or two years, limited to replacement of the product or refund of the cost of the product. In addition, we offer our customers extended warranties. Repeated or widespread quality problems could result in significant warranty expenses and/or the loss of customer confidence. The occurrence of such quality problems could have a material adverse effect on our business, operating results and financial condition.

Intense competition, and continued consolidation in our industry could create stronger competitors and harm the business

The wireless telecommunications equipment market is very competitive. Many of these companies have substantially greater financial resources, larger research and development staffs and greater manufacturing and marketing capabilities than we do. Our products compete directly with products which embody existing and future competing commercial technologies. Other emerging wireless technologies may also provide protection from RF interference and offer enhanced range to wireless communication service providers, potentially at lower prices and/or superior performance, and may therefore compete with our products. High performance RF solutions may not become a preferred technology to address the needs of wireless communication service providers. Failure of our products to improve performance sufficiently, reliably, or at an acceptable price or to achieve commercial acceptance or otherwise

compete with existing and new technologies, would have a material adverse effect on our business, operating results and financial condition.

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LEGAL RISKS

Intellectual Property and Patents

Our success will depend in part on our ability to obtain patent protection for our products and processes, to preserve trade secrets and to operate without infringing upon the patent or other proprietary rights of others and without breaching or otherwise losing rights in the technology licenses upon which any of our products are based. We have applied for patents for inventions developed internally and acquired patent rights in connection with the purchase of the Adaptive Notch Filtering business unit of Lockheed Martin Canada. One of the patents is jointly owned with Lucent Technologies, Inc. We believe there are a large number of patents and patent applications covering RF products and other products and technologies that we are pursuing. Accordingly, the patent positions of companies using RF technologies, including us, are uncertain and involve complex legal and factual questions. The patent applications filed by us or others may not result in issued patents or the scope and breadth of any claims allowed in any patents issued to us or others may not exclude competitors or provide competitive advantages. In addition, patents issued to us, our subsidiaries or others may not be held valid if subsequently challenged or others may claim rights in the patents and other proprietary technologies owned or licensed by us. Others may have developed or may in the future develop similar products or technologies without violating any of our proprietary rights. Furthermore, the loss of any license to technology that we might acquire in the future may have a material adverse effect on our business, operating results and financial condition.

Some of the patents and patent applications owned by us are subject to non-exclusive, royalty-free licenses held by various U.S. governmental units. These licenses permit these U.S. government units to select vendors other than us to produce products for the U.S. Government, which would otherwise infringe our patent rights that are subject to the royalty-free licenses. In addition, the U.S. Government has the right to require us to grant licenses (including exclusive licenses) under such patents and patent applications or other inventions to third parties in certain instances.

Older patent applications in the U.S. are currently maintained in secrecy until patents are issued. In foreign countries and for newer U.S. patent applications, this secrecy is maintained for a period of time after filing. Accordingly, publication of discoveries in the scientific literature or of patents themselves or laying open of patent applications in foreign countries or for newer U.S. patent applications tends to lag behind actual discoveries and filing of related patent applications. Due to this factor and the large number of patents and patent applications related to RF materials and technologies, and other products and technologies that we are pursuing, comprehensive patent searches and analyses associated with RF technologies and other products and technologies that we are pursuing are often impractical or not cost-effective. As a result, patent and literature searches cannot fully evaluate the patentability of the claims in our patent applications or whether materials or processes used by us for our planned products infringe or will infringe upon existing technologies described in U.S. patents or may infringe upon claims in patent applications made available in the future. Because of the volume of patents issued and patent applications filed relating to RF technologies and other products and technologies that we are pursuing, we believe there is a significant risk that current and potential competitors and other third-parties have filed or will file patent applications for, or have obtained or will obtain, patents or other proprietary rights relating to materials, products or processes used or proposed to be used by us. In any such case, to avoid infringement, we would have to either license such technologies or design around any such patents. We may be unable to obtain licenses to such technologies or, if obtainable, such licenses may not be available on terms acceptable to us or we may be unable to successfully design around these third-party patents.

Our participation in litigation or patent office proceedings in the U.S. or other countries to enforce patents issued or licensed to us, to defend against infringement claims made by others or to determine the ownership, scope or validity of the proprietary rights of us and others, could result in substantial cost to, and diversion of effort by, us. The parties

to such litigation may be larger, better capitalized than we are and better able to support the cost of litigation. An adverse outcome in any such proceedings could subject us to significant liabilities to third parties, require us to seek licenses from third parties and/or require us to cease using certain technologies, any of which could have a material adverse effect on our business, operating results and financial condition.

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Litigation

We have no active lawsuits, nor any pending or threatened to the best of our knowledge. The act of defending against any potential claim may be costly and divert management attention. If we are not successful in defending against whatever claims and charges may be made against us in the future, there may be a material adverse effect on our business, operating results and financial condition.

Government Regulations

Although we believe that our wireless telecommunications products themselves are not subject to licensing by, or approval requirements of, the FCC, the operation of base stations is subject to FCC licensing and the radio equipment into which our products would be incorporated is subject to FCC approval. Base stations and the equipment marketed for use therein must meet specified technical standards. The ability to sell our wireless telecommunications products is dependent on the ability of wireless base station equipment manufacturers and wireless base station operators to obtain and retain the necessary FCC approvals and licenses. In order for them to be acceptable to base station equipment manufacturers and to base station operators, the characteristics, quality and reliability of our base station products must enable them to meet FCC technical standards. We may be subject to similar regulations of foreign governments. Any failure to meet such standards or delays by base station equipment manufacturers and wireless base station operators in obtaining the necessary approvals or licenses could have a material adverse effect on our business, operating results and financial condition. In addition, certain RF filters are on the U.S. Department of Commerce’s export regulation list. Therefore, exportation of such RF filters to certain countries may be restricted or subject to export licenses.

We are subject to governmental labor, safety and discrimination laws and regulations with substantial penalties for violations. In addition, employees and others may bring suit against us for perceived violations of such laws and regulations. Defending against such complaints could result in significant legal costs for us. Although we endeavor to comply with all applicable laws and regulations, we may be the subject of complaints in the future, which could have a material adverse effect on our business, operating results and financial condition.

Environmental Liability

Certain hazardous materials may be used in research, development and to the extent of any manufacturing operations. As a result, we are subject to stringent federal, state and local regulations governing the storage, use and disposal of such materials. It is possible that current or future laws

and regulations could require us to make substantial expenditures for preventive or remedial action, reduction of chemical exposure, or waste treatment or disposal. We believe we are in material compliance with all environmental regulations and to date have not had to incur significant expenditures for preventive or remedial action with respect to the use of hazardous materials.

However, our operations, business or assets could be materially and adversely affected by the interpretation and enforcement of current or future environmental laws and regulations. In addition, although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, there is the risk of accidental contamination or injury from these materials. In the event of an accident, we could be held liable for any damages that result. Furthermore, the use and disposal of hazardous materials involves the risk that we could incur substantial expenditures for such preventive or remedial actions. The liability in the event of an accident or the costs of such actions could exceed available resources or otherwise have a material adverse effect on the business, results of operations and financial condition. We carry property and worker’s compensation insurances

in full force and effect through nationally known carriers which include pollution cleanup or removal and medical claims for industrial incidents.

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RISKS RELATED TO ACQUISITIONS AND BUSINESS EXPANSION

Risks of future acquisitions

In the future, we may pursue acquisitions to obtain products, services and technologies that we believe would complement or enhance our current product or services offerings. At present, no definitive agreements or similar arrangements exist with respect to any such acquisition. An acquisition may not produce the revenue, earnings or business synergies as anticipated and may attach significant unforeseen liabilities, and an acquired product, service or technology might not perform as expected. If an acquisition is pursued, our management could spend a significant amount of time and effort in identifying and completing the acquisition and may be distracted from the operations of the business. In addition, management would probably have to devote a significant amount of resources toward integrating the acquired business with the existing business, and that integration may not be successful.

International operations

We are in discussions and have agreements in place with companies in non-U.S. markets to form manufacturing, product development joint ventures and other marketing, distribution or consulting arrangements. We also have agreements with foreign entities for international distribution as well as foreign sources of components to be used in North America. These agreements and relationships help us optimize our competitive position and cost structure. There are many such entities that exist, domestically and internationally, that offer similar capabilities, and thus could reduce risk exposure to the loss of such foreign entities.

We believe that non-U.S. markets could provide a substantial source of revenue in the future. However, there are certain risks applicable to doing business in foreign markets that are not applicable to companies doing business solely in the U.S. For example, we may be subject to risks related to fluctuations in the exchange rate between the U.S. dollar and foreign currencies in countries in which we do business. In addition, we may be subject to the additional laws and regulations of these foreign jurisdictions, some of which might be substantially more restrictive than similar U.S. ones. Foreign jurisdictions may also provide less patent protection than is available in the U.S., and we may be less able to protect our intellectual property from misappropriation and infringement in these foreign markets.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We maintain our corporate headquarters in a 15,000 square foot building located in Elk Grove Village, Illinois under a lease which expires in October 2014. This facility houses our manufacturing, research, development, engineering, administration and marketing activities. We also maintain a 4,000 square foot facility located in Elk Grove Village, Illinois under a lease which expires in October 2014, which is used for R&D purposes. We believe that these facilities are adequate and suitable for our current needs and that additional space would be available on commercial terms as necessary to meet any future needs.

Item 3. Legal Proceedings

None. We were not involved in any such proceedings during 2006 nor are we aware of any pending or threatened litigation.

Item 4. Submission of Matters to a Vote of Security Holders

None.

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PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

Our common stock has been listed since June 2002 on the American Stock Exchange under the symbol “ISO.” Prior to that, and until April 1999, our stock had been listed on the OTC Bulletin Board under the symbol “ISCO.” From 1993 until April 1999, our common stock was listed on the NASDAQ National Market. The following table shows, for the periods indicated, the reported high and low sale prices for the common stock. Such prices reflect prices between dealers, without retail mark up, mark down, or commissions and may or may not reflect actual transactions.

	High	Low
FISCAL YEAR ENDED DECEMBER 31, 2005		
First Quarter	$ 0.52	$ 0.28
Second Quarter	$ 0.41	$ 0.22
Third Quarter	$ 0.29	$ 0.23
Fourth Quarter	$ 0.45	$ 0.25
FISCAL YEAR ENDED DECEMBER 31, 2006		
First Quarter	$ 0.43	$ 0.30
Second Quarter	$ 0.43	$ 0.25
Third Quarter	$ 0.36	$ 0.27
Fourth Quarter	$ 0.45	$ 0.30

On December 31, 2006, there were approximately 300 holders of record of our common stock. On such date the closing bid price for our common stock as reported on the American Stock Exchange was $0.34.

We have never paid cash dividends on the common stock and we do not expect to pay any dividends on our common stock in the foreseeable future. In addition, borrowings under our line of credit are collateralized by all of our assets — we are prohibited from paying any dividends, other than dividends consisting solely of common stock or rights to purchase common stock, unless our lenders waive such prohibition.

Except as reported on our Current Reports on Form 8-K filed with the Securities and Exchange Commission on July 26, 2006 and August 3, 2006, there were no recent sales of unregistered securities during 2006. Further, there were no repurchases of equity securities by us during the fourth quarter of 2006.

Item 6. Selected Financial Data

The following table presents selected consolidated financial data with respect to us as of and for the years ended December 31, 2002, 2003, 2004, 2005, and 2006. The selected consolidated financial data for each of the years in the five-year period ended December 31, 2006 have been derived from our audited consolidated financial statements. The information set forth below should be read in conjunction with Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Item 8. “Financial Statements and Supplementary Data.”

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	2002	2003	2004	2005	2006
CONSOLIDATED STATEMENT OF OPERATIONS DATA					
Net sales	$ 3,662,805	$ 3,238,402	$ 2,621,933	$ 10,264,428	$ 14,997,320
Costs and expenses:					
Cost of sales	3,565,140	1,639,540	1,527,554	5,121,650	9,066,929
Research and development	2,737,084	988,425	1,119,406	1,767,447	2,011,652
Selling and marketing	2,201,195	959,798	1,164,830	1,861,065	3,207,882
General and administrative	7,972,948	5,614,492	4,757,935	3,691,070	4,287,080
Operating loss	(12,813,562)	(5,963,853)	(5,947,792)	(2,176,804)	(3,576,223)
Other income (Expense)					
Interest income	62,954	5,087	8,660	77,383	118,590
Interest expense	(327,224)	(1,197,309)	(1,028,169)	(877,461)	(907,351)
Total other expense, net	(264,270)	(1,192,222)	(1,019,509)	(800,078)	(788,761)
Net loss	$(13,077,832)	$ (7,156,075)	$ (6,967,301)	(2,976,882)	$ (4,364,984)
Basic and diluted loss per common share	$ (0.09)	$ (0.05)	$ (0.04)	$ (0.02)	$ (0.02)
Weighted average number of common shares outstanding	142,884,921	148,080,749	158,977,249	170,786,657	185,506,261
CONSOLIDATED BALANCE SHEET DATA					
Cash and cash equivalents	$216,119	$346,409	$402,391	$3,486,430	$ 2,886,476
Working capital	1,333,827	735,840	979,413	6,396,541	(1,422,309)
Total assets	19,183,000	17,723,035	17,133,752	22,905,633	26,875,195
Long-term debt, less current portion	2,000,000	5,000,000	7,500,000	10,520,369	5,131,762
Stockholders' equity	15,380,306	10,943,247	7,247,635	10,530,716	8,164,192

We received $150,000 from our landlord for leasehold improvements during late 2004 and early 2005. Consistent with the appropriate accounting treatment of showing these items separately (i.e., showing the full value of the leasehold improvement within fixed assets and the unamortized value of the landlord credit within current liabilities) working capital and total assets were reclassified in the 2004 figure above to conform to the 2005 presentation of these items. This reclassification has no material effect on the business condition or results.

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

A NOTE CONCERNING FORWARD-LOOKING STATEMENTS

The discussion below contains certain forward-looking statements that reflect our current expectations regarding the Company's future results of operations, performance and achievements. Please see the discussion of such forward-looking statements under "Forward Looking Statements" above.

Overview

We have employed an outsourced manufacturing model wherein we supply raw materials to external parties and products are then completed. Further, this system allows us to outsource procurement in the future if we choose to do so. Manufacturing partners then produce to specification with Company personnel on hand to assist with quality control. Our products are designed for efficient production in this manner, emphasizing solid-state electronics over mechanical devices with moving parts. The cost benefits associated with these developments, coupled with enhanced product functionality, have allowed us to realize good margins and efficiently managed overhead costs. Extensions of developed technology, based on substantial input from customers, have allowed us to launch the RF^2 product family and consider additional solutions while generally controlling total R&D cost.

Wireless telecommunications has undergone significant merger activity in recent years, a trend which we believe will continue. These activities often result in operators with disparate technologies and spectrum assets, and the need to integrate those assets. In addition, the deployment of data applications is adding to the industry requirement to integrate disparate technologies into base stations and other fixed points of access, resulting in the need to manage multiple wireless signals and keep them from interfering with each other. We are focused on providing solutions that address these types of requirements. During 2006, we bid on substantially larger business opportunities than we had in recent years. These proposals often are accompanied by long approval cycles and we may bear up-front product development costs. We believe the potential benefits to outweigh these costs, and expect to continue to bid on these types of business opportunities.

We announced several significant recent events during 2006 and early 2007, including a continuing trend of substantially increased revenue during 2006 which saw the three best quarterly revenue figures in our history, increased international sales and sourcing activities, additional penetration into our largest customers, our first products based partly on digital technology, and $5 million in funding intended to support new product development. Despite these improvements, the wireless telecommunications industry is subject to risks beyond our control that can negatively impact customer capital spending budgets (as occurred during 2003) and/or spending patterns (as occurred during 2004 and to a lesser extent on a quarterly basis after 2004). In addition, a large portion of our debt ($11.3 million) matures in August 2007 and must be refinanced. For these and other reasons, our financial statements have been prepared assuming we will continue as a going concern.

From a company-specific view, we have invested in measured infrastructure growth to allow for potentially substantial revenue expansion. This has caused spending to increase from 2004 levels. We believe that we now have the infrastructure largely in place to allow for such potential revenue expansion, and therefore as a general guideline do not expect fixed costs to rise, except for some R&D associated with product initiatives, during 2007.

We are pursuing digital technologies, evidenced by the deployment of our digital (front end) ANF solution platform during 2006, subsequent extensions of that platform, and our expectation to complete a fully digital ANF platform during 2007. We believe that producing solutions on a digital platform will allow us to extend coverage in the wireless telecommunications realm, both in more aspects of the cellular market and beyond the cellular market, and thus

greatly increase our available market.

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Results of Operations

Years Ended December 31, 2006 and 2005

Our net sales increased $4,733,000, or 46%, from $10,264,000 in 2005 to $14,997,000 in 2006. This increase was due primarily to the expansion of the RF² product family and related revenues, particularly from data network deployments. An incremental improvement was also seen from the shipment of more ANF products during 2006 than during prior years. We saw our first deferred software revenue during 2006, carrying nearly $0.2 million in deferred software maintenance revenue into 2007. We anticipate our unit volume and related revenue to increase during 2007 as compared to 2006, due to existing and/or anticipated customer orders. Our order backlog as of December 31, 2006 remained minimal, which was consistent with the end of 2005. However, we are pursuing substantial potential revenue opportunities as of the beginning of 2007.

Cost of products sold increased $3,945,000, or 77%, from $5,122,000 in 2005 to $9,067,000 in 2006. The increase in cost of sales was due to the increase in sales volume, as well as a less favorable product mix than was realized during the prior year. RF² products have varied gross margins, but typically are below margins for ANF products, and the expansion of lower margin products outpaced that of the higher margin products. We believe that our consistent gross margin of 40% during 2006 is superior to the industry norm, but it was below our record 50% achieved during 2005.

Our internally funded research and development expenses increased $245,000, or 14%, from $1,767,000 in 2005 to $2,012,000 during 2006. We expensed approximately $200,000 of capitalized patent-related charges during the second quarter 2005, as we deemed such items to be unlikely to generate significant future revenues, so the increase in 2006 cash spend over 2005 was $200,000 more than reported above. We added a significant number of products to our RF² product family during 2006, including a GMA ("ground mounted amplifier"), as well as the first digital platformed ANF products. We expect to continue to invest more in R&D during 2007 than we did during 2006 as we expand both our existing product families and develop two new product lines that would be applicable in wireless technologies beyond cellular telecommunications, particularly in the digital space.

Selling and marketing expenses increased $1,347,000, or 72%, from $1,861,000 during 2005 to $3,208,000 during 2006. The increase in expense was attributable to the continued addition of personnel in this area as we pursue additional customers and larger, more diverse opportunities (these elements contributed to the 46% annual revenue growth increase in 2006 over 2005; and higher if viewed on a quarterly basis during the last three quarters of 2006). We have also performed extensive customer development activities as we have added new customers and launched new products, including a very detailed and comprehensive interference study over a wide geographic range (a one-time cost of approximately $0.2 million).

General and administrative expenses increased $596,000, or 16%, from $3,691,000 in 2005 to $4,287,000 during 2006. This increase was largely attributable to a $0.5 million increase in non-cash equity charges associated with stock-based compensation.

Interest income increased $42,000, or 55%, from $77,000 in 2005 to $119,000 during 2006. This increase was due to the timing of payments and funding from the June 2006 financing proceeds. Additionally, we saw improved cash flows from operations during the second half of 2006.

Interest expense increased $30,000, or 3.4%, from $877,000 in 2005 to $907,000 during 2006. We borrowed $5 million under a convertible debt arrangement during June 2006 with our two largest shareholders, including affiliates, which also hold the remainder of our debt which matures August 2007.

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Years Ended December 31, 2005 and 2004

Our net sales increased $7,642,000, or 291%, from $2,622,000 in 2004 to $10,264,000 in 2005. This increase was due primarily to the expansion of the RF² product family and related revenues, particularly from data network deployments. An incremental improvement was also seen from the shipment of more ANF products during 2005, such that we earned more revenue from ANF sales than any prior year, including 2004.

Cost of products sold increased $3,594,000, or 235%, from $1,528,000 in 2004 to $5,122,000 in 2005. The increase in cost of sales was due to the increase in sales volume offset by the more efficient allocation of fixed expenses, the expanded sourcing of raw materials and resulting cost decreases, and other efficiencies.

Our internally funded research and development expenses increased $648,000, or 58%, from $1,119,000 in 2004 to $1,767,000 during 2005. We expensed approximately $200,000 of capitalized patent-related charges during the second quarter 2005, as we deemed such items to be unlikely to generate significant future revenues. We added a significant number of products to our RF² product family during 2005, including a multicoupler solution and a PCS spectrum portfolio.

Selling and marketing expenses increased $696,000, or 60%, from $1,165,000 during 2004 to $1,861,000 during 2005. We have continued to add personnel in this area as we pursue larger business opportunities and additional customers, and thus expect to continue to incur a higher level of selling and marketing expenses in future periods. It should be noted that this cost as a percentage of revenue has decreased from 44% during 2004 to 18% during 2005, reflecting efficiencies in higher sales volume as fixed expenses are allocated over a larger base.

General and administrative expenses decreased $1,067,000, or 22%, from $4,758,000 in 2004 to $3,691,000 during 2005. This decrease was attributable to a $1 million decrease in legal expenses, primarily related to the concluded patent litigation, the reduction in facility costs by approximately $250,000 annually, which is offset by various increases in personnel and related costs due to growth in our size.

Interest income increased $68,000, or 756%, from $9,000 in 2004 to $77,000 during 2005. This increase was due to the timing of payments and funding from the credit line and the August 2005 financing proceeds.

Interest and warrant expense decreased $151,000, or 15%, from $1,028,000 in 2004 to $877,000 during 2005. We borrowed $1 million under our credit line arrangement during 2005, but pursuant to a financing agreement with our lenders, the interest rate was reduced from 14% to 9% as of April 2005.

Liquidity and Capital Resources

The accompanying financial statements have been prepared assuming that we will continue as a going concern. As discussed in Note 3 to the financial statements, we incurred a net loss of $4 million during the year ended December 31, 2006, and, as of that date, our accumulated deficit is $164 million. In addition, we have consistently used, rather than provided, cash in our operations. These factors, among others, as discussed in Note 3 to the financial statements, raise substantial doubt about our ability to continue as a going concern. We have been engaged in developing new solutions, and toward that end development spending has preceded sales revenues. Management's plans in regard to these matters include the focusing of development efforts on products with a greater probability of commercial sales, increased efficiencies and reduced product costs within our outsourced production model, all of which are also described in Note 3. The financial statements do not include any adjustments, including any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from the outcome of this uncertainty. Significant uses of cash during 2006 included the cost to produce inventory, personnel costs, facility related costs, increased product development (engineering) costs and

sales and marketing efforts. Significant sources of cash during 2006 included sales and the resulting realization of customer receivables, the sale of $5 million in convertible debt in June 2006 to entities that, along with their affiliates, are our lenders and also our largest two shareholders.

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Current assets including accounts receivable and inventory, and current liabilities including accounts payable and accrued expenses, increased from the prior year figure due to overall higher business levels. Quarterly and annual revenue during 2006 were the highest in our history and, on average, roughly 50% larger than that of the prior year, and thus created larger working capital balances. Working capital includes the classifications listed above.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying balance sheet is dependent upon continued operations, which in turn is dependent upon our ability to meet our financing requirements on a continuing basis, to maintain present financing, and to succeed in our future operations.

At December 31, 2006, our cash and cash equivalents, excluding restricted certificates of deposit, were $2,886,000, a decrease of $600,000 from the December 31, 2005 balance of $3,486,000. This decrease was primarily attributable to the increase in working capital (inventories and accounts receivable) associated with our higher revenue levels and the timing of orders and related shipments.

The continuing development of, and expansion in, sales of our product lines, any potential merger and acquisition activity, as well as any required defense of our intellectual property, may require a commitment of funds to undertake product line development and to market and sell our RF products. The actual amount of our future funding requirements will depend on many factors, including: the amount and timing of future revenues, the level of product marketing and sales efforts to support our commercialization plans, the magnitude of our research and product development programs, our ability to improve or maintain product margins, and the costs involved in protecting our patents or other intellectual property.

We believe that we have sufficient funds to operate our business until $11.3 million of our debt becomes due in August 2007. That debt is held by our two largest shareholders, including affiliates. While we expect to refinance this debt no such refinancing has occurred as of the reporting date, therefore, the ability to refinance our debt and maintain adequate working capital is necessary for us to continue as a going concern Additionally, we project increases in working capital requirements in order to pursue significant business opportunities during 2007 and beyond, and also expect to spend additional financial resources in the expansion of our business and product offerings. As such, we may require additional capital prior to August 2007. We intend to look into augmenting our existing capital position by continuing to evaluate potential short-term and long-term sources of capital whether from debt, equity, hybrid, or other methods. The primary covenant in our existing debt arrangement involves the right of the lenders to receive debt repayment from the proceeds of new financing activities. This covenant may restrict our ability to obtain additional financing or to apply the proceeds of a financing event toward operations until the debt is repaid in full.

Uncommitted Line of Credit (2002 Credit Line)

As of the reporting date, we have drawn $8.5 million of debt financing under a credit line, as described below. During October 2002, we entered into an uncommitted line of credit with our two largest shareholders, an affiliate of Elliott Associates, L.P. (Manchester Securities Corporation) and Alexander Finance, L.P. This line initially provided up to $4 million to us. This line was uncommitted, such that each new borrowing under the facility would be subject to the approval of the lenders. Borrowings on this line bore an initial interest rate of 9.5% and were collateralized by all the assets of the Company. Outstanding loans under this agreement would be required to be repaid on a priority basis should we receive new funding from other sources. Additionally, the lenders were entitled to receive warrants to the extent funds were drawn down on the line. The warrants bore a strike price of $0.20 per share of common stock and were to expire on April15, 2004. The credit line was to mature and be due, including accrued interest thereon, on March 31, 2004. Due to a subsequent agreement between the parties no warrants were issued with subsequent borrowings.

According to existing accounting pronouncements and SEC guidelines, we allocated the proceeds of these borrowings between their debt and equity components. As a result of these borrowings during 2002, we recorded a non-cash charge of $1.2 million through the outstanding term of the warrants (April, 2004). $250,000 and $862,000 of that amount were recorded during 2004 and 2003, respectively. These warrants were valued at $1.2 million of the $2 million debt instrument based on a Black-Scholes valuation that included the difference between the value of our common stock and the exercise price of the warrants on the date of each warrant issuance and a 30% discounted face value of the notes, leaving the remaining $0.8 million as the underlying value of the debt. This $1.2 million was amortized over the vesting period of the warrants (six quarters from the fourth quarter 2002 through the first quarter 2004).

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During October 2003, we entered into an agreement with our lenders to supplement the credit line with an additional $2 million, $1 million of which was drawn immediately and $1 million subsequently drawn upon our request and subject to the approval of the lenders. This supplemental facility bore a 14% rate of interest and was due October 31, 2004. The term of the previous credit line was not affected by this supplement, and as such the $4 million borrowed under that line, plus accrued interest, remained due March 31, 2004.

During February 2004, the credit line was extended to a due date of April 2005, with interest after the initial periods to be charged at 14%. No warrants or other inducements were issued with respect to this extension. Additionally, lenders exercised their 10 million warrants during February 2004, agreeing to let us use the funds for general purposes as opposed to repaying debt.

During July 2004, we and our lenders agreed to increase the aggregate loan commitments under the credit line from $6,000,000 to $6,500,000. Simultaneously, we drew the remaining $1,500,000 of the financing.

During November 2004, we and our lenders agreed to increase the line of credit to up to an additional $2 million to an aggregate loan commitment of $8,500,000, $1 million of which was drawn immediately by us with the remaining $1 million drawable upon our request and subject to the approval of the lenders, which occurred during January 2005.

During February 2005, the credit line was extended until April 2006. Interest during the extension period was to be charged at 9%. No warrants or other inducements were issued with respect to this extension.

On August 2, 2005, we and our lenders agreed to extend the due date from April 2006 until August 2007, and the lenders also agreed to waive the Company's obligation to repay its debt with proceeds from an equity financing transaction with its lenders, including affiliates, in August 2005. No warrants or other inducements were issued as a result of this transaction.

2006 Convertible Debt

During June 2006 we entered into a Securities Purchase Agreement (the "Agreement") and convertible notes (the "Notes") with Alexander Finance, L.P., and Manchester Securities Corporation L.P. (together, the "Lenders"), pursuant to which the Lenders have agreed, to each loan us $2,500,000, or an aggregate of $5,000,000, in convertible debt. The Lenders, including affiliates, are our two largest shareholders and the lenders of the 2002 Credit Line referenced above. The transaction was structured as a private placement of securities pursuant to Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act") and Rule 506 promulgated thereunder.

The Notes will mature on June 22, 2010 and bear an interest rate of 5% due at maturity. Both the principal amount and any accrued interest on the Notes are convertible into our common stock at a rate of $0.33 per share, subject to certain anti-dilution adjustments. The Lenders have the right to convert the Notes, both principal and accrued interest, into shares of common stock at the rate of $0.33 per share at any time. We have the right to redeem the Notes in full in cash at any time beginning two years after the date of the Agreement. The conversion rate of the Notes will be subject to customary anti-dilution protections, provided that the number of additional shares of common stock issuable as a result of changes to the conversion rate will be capped so that the aggregate number of shares of common stock issuable upon conversion of the Notes will not exceed 19.99% of the aggregate number of shares of common stock presently issued and outstanding.

The Notes are secured on a first priority basis by all of our intangible and tangible property and assets. Payment of the Notes is guaranteed by our two inactive subsidiaries, Spectral Solutions, Inc. and Illinois Superconductor Canada

Corporation. The Agreement contains customary representations, warranties and covenants. We filed a registration statement covering the resale of the shares of common stock issuable upon conversion of the Notes with the Securities and Exchange Commission. Concurrently with the execution of the Agreement, the Lenders have waived their right under the 2002 Credit Line to receive the financing proceeds from the issuance of the Notes, allowing us to use the funds for product development or general working capital purposes. No fees were paid to any financial advisor, placement agent, broker or finder in connection with the transactions contemplated by the Agreement and the Notes.

Assuming the Notes are held for the full four year term, 18,505,719 shares of common stock would be required upon settlement, for both principal and interest. This amount is approximately 10% of the then approximately 186 million shares of common stock currently issued and outstanding. As of December 31, 2006, the Lenders, including their affiliates, owned approximately 43% of the Company's outstanding shares. As a result of this transaction, the combined holdings of the Lenders would be approximately 48% of the Company's outstanding common stock.

Critical Accounting Policies

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amount of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of our financial statements. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies are defined as those that are reflective of significant judgments and uncertainties, and potentially result in materially different results under different assumptions and conditions. We believe that our critical accounting policies are limited to those described below. For a detailed discussion on the application of these and other accounting policies, see Note 2 in the notes to the consolidated financial statements.

Revenue Recognition

In accordance with SAB No. 104, we recognize revenue when the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, price is fixed and determinable, and collectability is reasonably assured. Revenues from product sales are generally recognized at the time of shipment and are recorded net of estimated returns and allowances. Revenues from services are generally recognized upon substantial completion of the service and acceptance by the customer. We have under certain conditions, granted customers the right to return product during a specified period of time after shipment. In these situations, we establish a liability for estimated returns and allowances at the time of shipment and make the appropriate adjustment in revenue recognized for accounting purposes. During 2006, no revenue was recognized on products that included a right to return or otherwise required customer acceptance after December 31, 2006. We have established a program which, in certain situations, allows customers or prospective customers to field test our products for a specified period of time. Revenues from field test arrangements are recognized upon customer acceptance of the products.

During 2006, we began to sell the dANF product which contains software that is essential to the functionality of the product and as such is required to be accounted for in accordance with SOP 97-2, "Software Revenue Recognition," as amended by SOP 98-9, "Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions." The revenue recognized for each separate element of a multiple-element software contract is based upon vendor-specific objective evidence of fair value, which is based upon the price the customer is required to pay when the element is sold separately. The dANF product is recognized as revenue upon shipment while the maintenance is deferred and recognized on a straight line basis during the applicable maintenance period, typically 1-3 years.

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We warrant our products against defects in materials and workmanship typically for a 1-2 year period from the date of shipment, though these terms may be negotiated on a case by case basis. A provision for estimated future costs related to warranty expenses is recorded when revenues are recognized. At both December 31, 2006 and 2005 we accrued $34,000 for warranty costs. This warranty reserve is based on the cost to replace a percentage of products in the field at a given point, adjusted by actual experience. Returns and allowances were not significant in any period reported, and form a data point in establishing the reserve. Should this warranty reserve estimate be deemed insufficient, by new information, experience, or otherwise, an increase to warranty expense would be required.

Goodwill and Intangible Assets

During 2006, we completed our annual process of evaluating goodwill for impairment under SFAS No. 142 “Goodwill and Other Intangible Assets”. As the fair value of the enterprise, using quoted market prices for our common stock, exceeded the carrying amount, goodwill was determined to be not impaired. We assess the potential for impairment of goodwill annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired. If we determine that the carrying value of goodwill is less than its fair value, a write-down may be required. In accordance with SFAS No. 144 “Accounting for the Impairment or Disposal of Long-Lived Assets”, we review our identifiable intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Recoverability of the intangible assets is measured by a comparison of the carrying amount to the fair value. If intangible assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds the fair value.

Allowance for Doubtful Receivables

An allowance for doubtful receivables may be maintained for potential credit losses. Management specifically analyzes accounts receivable, on a client by client basis, when evaluating the adequacy of our allowance for doubtful receivables including customer credit worthiness and current economic trends and records any necessary bad debt expense based on the best estimate of the facts known to date. Alternatives to this approach include applying a fixed and/or empirical rate of bad debts to receivables. Bad debts have historically been very low (none in 2006 or 2005). We believe our current method to be less arbitrary and more reliable than the alternatives as described. Should the facts regarding the collectability of receivables change, the resulting change in the allowance would be charged or credited to income in the period such determination is made. Such a change could materially impact our financial position and results of operations.

Stock-Based Compensation

Effective January 1, 2006, we adopted the provisions of Statement of Financial Accounting Standards ("SFAS") No. 123R, "Share-Based Payment," ("FAS 123R") which establishes accounting for equity instruments exchanged for employee services. Under the provisions of FAS 123R, share-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity grant). Performance-based grants (grants that vest upon a future event and not due to the passage of time) are not expensed until we believe it probable that vesting will occur. We elected to adopt the modified prospective transition method as provided by FAS 123R and, accordingly, financial statement amounts for the prior periods have not been retroactively adjusted to reflect the fair value method of expensing share-based compensation. Under the modified prospective method, share-based expense recognized after adoption includes: (a) share-based expense for all awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value and (b) share-based expense for all awards granted subsequent to January 1, 2006. We changed our equity compensation practices at the same time to emphasize grants of restricted stock as opposed to stock options. As most options were fully vested as of January 1, 2006, only a small portion of its total equity compensation expense came from stock options, with the vast majority coming from grants of restricted stock. Grants

of restricted stock are valued at the market price on the date of grant and amortized during the service period on a straight-line basis or the vesting of such grant, whichever is higher.

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Contractual Obligations, Commitments, and Off Balance Sheet Arrangements

No such arrangements existed as of December 31, 2006, except for leases as described and the minimum lease payments as detailed in this document.

Contractual Obligations	Payments Due by Period				
Year	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long Term Debt Obligations	$ 17,787,000	$ 11,746,000	-	$ 6,041,000	-
Operating Lease Obligations	$ 1,659,000	$ 201,000	$ 413,000	$ 427,000	$ 618,000
Total	$ 19,446,000	$ 11,947,000	$ 413,000	$ 6,468,000	$ 618,000

Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"). This statement defines fair value as used in numerous accounting pronouncements, establishes a framework for measuring fair value in generally accepted accounting principles ("GAAP") and expands disclosure related to the use of fair value measures in financial statements. SFAS 157 does not expand the use of fair value measures in financial statements, but standardizes its definition and guidance in GAAP. SFAS 157 is effective for fiscal years beginning after November 15, 2007. We plan to adopt the provisions of SFAS 157 on January 1, 2008. We are evaluating the potential impact of SFAS 157, but at this time do not anticipate that it will have an impact on our financial statements when adopted.

In September 2006, the Securities and Exchange Commission ("SEC") released Staff Accounting Bulletin No. 108, "Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements" ("SAB 108"). SAB 108 provides guidance on how the effects of the carryover or reversal of prior year financial statement misstatements should be considered in quantifying a current year misstatement. Prior practice allowed the evaluation of materiality on the basis of (1) the error quantified as the amount by which the current year income was misstated ("rollover method") or (2) the cumulative error quantified as the cumulative amount by which the current year balance sheet was misstated ("iron curtain method"). The guidance provided by SAB 108 requires both methods to be used in evaluating materiality. Immaterial prior year errors may be corrected with the first filing of prior year financial statements after adoption. The cumulative effect of the correction would be reflected in the opening balance sheet with appropriate disclosure of the nature and amount of each individual error corrected in the cumulative adjustment, as well as a disclosure of the cause of the error and that the error had been deemed to be immaterial in the past. We adopted SAB 108 for the year ended December 31, 2006, as required, and the adoption did not have a significant impact on our results of operations or financial position.

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In July 2006, FASB released FASB Interpretation No. 48, “Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109” (FIN 48). FIN 48 clarifies the accounting and reporting for uncertainties in income tax positions. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years ending after December 15, 2006. We will adopt FIN 48 as of January 1, 2007, as required. The cumulative effects, if any, of applying this Interpretation will be recorded as an adjustment to retained earnings as of the beginning of the period of adoption. We do not believe the adoption of FIN 48 will impact our results of operations or financial position.

In May 2005, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 154, “Accounting Changes and Error Corrections”, a replacement of APB Opinion No. 20 and FASB Statement No. 3. This statement applies to all voluntary changes in accounting principle, and requires retrospective application to prior periods’ financial statements for changes in accounting principle. SFAS No. 154 was effective for us beginning on January 1, 2006. This statement didn't have a material impact on our financial statements.

Effective January 1, 2006, we adopted SFAS No. 123(R), “Share Based Payments,” as described in Note 7, in the Notes to the Consolidated Financial Statements. For the year ended December 31, 2006, the effect on the results of operations of recording stock-based compensation in accordance with SFAS 123(R) was $1.6 Million.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We do not have any material market risk sensitive instruments.

Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors
ISCO International, Inc.

We have audited the accompanying consolidated balance sheets of ISCO International, Inc. (a Delaware corporation) and subsidiaries, as of December 31, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits 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 the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of ISCO International, Inc. and subsidiaries as of December 31, 2006 and 2005, and the consolidated results of their operations and their cash flows for each of the three years ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3, the Company incurred a net loss of $4,364,984 during the year ended December 31, 2006, and, as of that date, the Company's accumulated deficit was $164,405,272. In addition, the Company has consistently used, rather than provided, cash in its operations. These factors, among others, as discussed in Note 3 to the financial statements, raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 3. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Notes 2 and 7 to the consolidated financial statements, effective January 1, 2006, the Company adopted Statement of Financial Accounting Standard Number 123 (revised 2004), "Share Based Payments."

Grant Thornton LLP

Chicago, Illinois
March 30, 2007

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ISCO INTERNATIONAL
CONSOLIDATED BALANCE SHEETS

	December 31, 2006	December 31, 2005
Assets:		
Current Assets:		
Cash and Cash Equivalents	$ 2,886,476	$ 3,486,430
Inventory	6,368,599	2,715,170
Accounts Receivable, net	2,554,716	1,677,334
Prepaid Expenses and Other	168,741	253,167
Total Current Assets	11,978,532	8,132,101
Property and Equipment	1,334,203	1,037,432
Less: Accumulated Depreciation	(811,167)	(720,142)
Net Property and Equipment	523,036	317,290
Restricted Certificates of Deposit	162,440	242,180
Goodwill	13,370,000	13,370,000
Intangible assets, net	841,187	844,062
Total Assets	$ 26,875,195	$ 22,905,633
Liabilities and Stockholders' Equity:		
Current Liabilities:		
Accounts Payable	$ 1,172,844	$ 416,095
Inventory-related material purchase accrual	328,663	530,134
Employee-related accrued liability	284,653	208,408
Accrued professional services	93,000	279,000
Other accrued liabilities and current deferred revenue	225,724	301,923
Current Portion of LT Debt, including related interest, with related parties	11,295,957	-
Total Current Liabilities	13,400,841	1,735,560
Deferred facility reimbursement	102,500	118,988
Deferred revenue - non current	75,900	-
Notes and related accrued interest with related parties, net of current portion	5,131,762	10,520,369
Stockholders' equity:		
Preferred stock; 300,000 shares authorized; No shares issued and outstanding at December 31, 2006 and December 31, 2005	-	-
Common stock ($.001 par value); 250,000,000 shares authorized; 189,622,133 and 183,252,018 shares issued and outstanding at December 31, 2006 and December 31, 2005, respectively	189,622	183,252
Additional paid-in capital	172,379,842	170,387,752
Accumulated deficit	(164,405,272)	(160,040,288)
Total Shareholders' Equity	8,164,192	10,530,716
Total Liabilities and Shareholders' Equity	$ 26,875,195	$ 22,905,633

See the accompanying Notes which are an integral part of the financial statements.

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ISCO INTERNATIONAL
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2006	2005	2004
Net sales	$ 14,997,320	$ 10,264,428	$ 2,621,933
Costs and expenses:			
Cost of sales	9,066,929	5,121,650	1,527,554
Research and development	2,011,652	1,767,447	1,119,406
Selling and marketing	3,207,882	1,861,065	1,164,830
General and administrative	4,287,080	3,691,070	4,757,935
Total costs and expenses	18,573,543	12,441,232	8,569,725
Operating loss	(3,576,223)	(2,176,804)	(5,947,792)
Other income (expense)			
Interest income	118,590	77,383	8,660
Non-cash warrant expense	-	-	(250,297)
Interest expense	(907,351)	(877,461)	(777,872)
Total other expense, net	(788,761)	(800,078)	(1,019,509)
Net loss	$ (4,364,984)	(2,976,882)	$ (6,967,301)
Basic and diluted loss per common share	$ (0.02)	(0.02)	$ (0.04)
Weighted average number of common shares outstanding	185,506,261	170,786,657	158,977,249

See the accompanying Notes which are an integral part of the financial statements.

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ISCO INTERNATIONAL
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years Ended December 31, 2004, 2005, and 2006

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Total
Balance as of December 31, 2003	150,149,927$	150,150$	160,889,202$	(150,096,105)$	10,943,247
Exercise of Stock Options	1,063,776	1,064	140,676	-	141,740
Exercise of Warrants	10,000,000	10,000	1,990,000	-	2,000,000
Stock-Based Compensation	-	-	879,652	-	879,652
Non-cash Warrant Expense	-	-	250,297	-	250,297
Net Loss	-	-	-	(6,967,301)	(6,967,301)
Balance as of December 31, 2004	161,213,703$	161,214$	164,149,827$	(157,063,406)$	7,247,635
Exercise of Stock Options	2,038,333	2,038	265,078	-	267,116
Equity Financing	20,000,000	20,000	4,280,000	-	4,300,000
Section 16b recovery	-	-	607,223	-	607,223
Stock-Based Compensation	-	-	1,085,624	-	1,085,624
Net Loss	-	-	-	(2,976,882)	(2,976,882)
Balance as of December 31, 2005	183,252,036$	183,252$	170,387,752$	(160,040,288)$	10,530,716
Exercise of Stock Options	2,582,826	2,583	427,330	-	429,913
Stock Grants Vested	3,787,271	3,787	(3,787)	-	
Section 16b recovery	-	-	3,124	-	3,124
Stock-Based Compensation	-	-	1,565,423	-	1,565,423
Net Loss	-	-	-	(4,364,984)	(4,364,984)
Balance as of December 31, 2006	189,622,133$	189,622$	172,379,842$	(164,405,272)$	8,164,192

See the accompanying Notes which are an integral part of the financial statements.

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ISCO INTERNATIONAL
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2006	2005	2004
OPERATING ACTIVITIES			
Net loss	$ (4,364,984)	$ (2,976,882)	$ (6,967,301)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	92,963	81,174	633,794
Amortization	54,431	56,560	50,325
Non-cash compensation charges	1,565,423	1,085,624	879,651
Non-cash warrant issuance-related expense	-	-	250,297
Patent-related charge	-	199,819	32,564
Changes in operating assets and liabilities:			
Accounts receivable	(877,382)	(1,554,874)	1,047,251
Inventories	(3,653,429)	(1,746,122)	(290,687)
Prepaid expenses and other	84,426	341,321	(273,341)
Accounts payable	756,749	213,482	(41,034)
Accrued liabilities and deferred revenue	476,837	1,290,565	499,616
Deferred occupancy costs	106,250	-	-
Net cash used in operating activities	(5,758,716)	(3,009,333)	(4,178,865)
INVESTING ACTIVITIES			
Decrease/ (Increase) in restricted certificates of deposit	79,740	48,847	(250,500)
Payment of patent costs	(51,556)	(49,121)	(38,707)
Acquisition of property and equipment, net	(302,458)	(80,694)	(117,686)
Net cash used in investing activities	(274,274)	(80,968)	(406,893)
FINANCING ACTIVITIES			
Proceeds from warrants	-	-	2,000,000
Proceeds from equity issuance	-	4,300,000	-
Proceeds from Section 16b recovery	3,124	607,223	-
Exercise of stock options	429,912	267,117	141,740
Proceeds from issuance of notes	5,000,000	1,000,000	2,500,000
Net cash provided by financing activities	5,433,036	6,174,340	4,641,740
Increase in cash and cash equivalents	(599,954)	3,084,039	55,982
Cash and cash equivalents at beginning of period	3,486,430	402,391	346,409
Cash and cash equivalents at end of period	$ 2,886,476	$ 3,486,430	$ 402,391
Supplemental cash flow information			
Cash paid for interest and income taxes	$ -	$ -	$ -

See the accompanying Notes which are an integral part of the financial statements

Notes to the Financial Statements

1. Description of Business

ISCO International (including its inactive subsidiaries, Spectral Solutions, Inc., and Illinois Superconductor Canada Corporation, the “Company”) addresses RF (Radio Frequency) and radio link optimization issues, including interference issues, within wireless communications. The Company uses unique products, including ANF, RF², and other solutions, as well as service expertise, in improving the RF handling of a wireless system, particularly the radio link (the signal between the mobile device and the base station). A subset of this capability is mitigating the impact of interference on wireless communications systems. These solutions are designed to enhance the quality, capacity, coverage and flexibility of wireless telecommunications services. The Company has historically marketed its products to cellular, PCS and wireless telecommunications service providers and OEM’s located both in the United States and in international markets.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Cash and Cash Equivalents

Cash and cash equivalents consist of demand deposits, time deposits, money market funds, and commercial paper which have original maturities of three months or less from the date of purchase. Management believes that the financial institutions in which it maintains such deposits are financially sound and, accordingly, minimal credit risk exists with respect to these deposits.

Accounts receivable

The majority of the Company’s accounts receivable is due from companies in the telecommunications industry. Credit is extended based on evaluation of a customers’ financial condition and, generally, collateral is not required. Accounts receivable are typically due within 30 days and are stated at amounts due from customers, net of an allowance for doubtful accounts. Accounts outstanding longer than the contractual payment terms are considered past due. The Company determines its allowance for doubtful accounts by considering a number of factors, including the length of time trade accounts receivable are past due, the Company’s previous loss history, the customer’s current ability to pay its obligation to the Company, and the condition of the general economy and the industry as a whole. The Company writes-off accounts receivable when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. The allowance could be materially different if economic conditions change or actual results deviate from historical trends.

Inventories

Inventories are stated at the lower of cost (determined on a first in, first out basis) or market.

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Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation, and are depreciated over the estimated useful lives of the assets using both straight line and accelerated methods. The accelerated method used is the double declining balance method. Software is typically amortized over 3 years utilizing the straight-line method. Leasehold improvements are amortized using the straight-line method over the shorter of the useful life of the asset or the term of the lease. Amortization of leasehold improvements is included in depreciation expense. The useful lives assigned to property and equipment for the purpose of computing book depreciation follow:

Manufacturing equipment	3 to 4 years
Office equipment	3 to 5 years
Furniture and fixtures	5 years
Leasehold improvements	Life of lease

Income Taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company uses a valuation allowance when it determines the amount of deferred tax asset to include in its financial statement for the current period is not realizable. This valuation allowance is based on historical patterns of taxable income, recognized deferred tax liabilities, and other factors that could impact the current view of future tax asset utilization.

Revenue Recognition

Revenues from product sales are generally recognized at the time of shipment and are recorded net of estimated returns and allowances. Revenues from services are generally recognized upon substantial completion of the service and acceptance by the customer. We have under certain conditions, granted customers the right to return product during a specified period of time after shipment. In these situations, we establish a liability for estimated returns and allowances at the time of shipment and make the appropriate adjustment in revenue recognized for accounting purposes. During 2006, no revenue was recognized on products that included a right to return or otherwise required customer acceptance after December 31, 2006. We have established a program which, in certain situations, allows customers or prospective customers to field test our products for a specified period of time. Revenues from field test arrangements are recognized upon customer acceptance of the products.

During 2006, we began to sell the dANF product which contains software that is essential to the functionality of the product and as such is required to be accounted for in accordance with SOP 97-2, “Software Revenue Recognition,” as amended by SOP 98-9, “Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions.” The revenue recognized for each separate element of a multiple-element software contract is based upon vendor-specific objective evidence of fair value, which is based upon the price the customer is required to pay when the element is sold separately. The dANF product is recognized as revenue upon shipment while the maintenance is deferred and recognized on a straight line basis during the applicable maintenance period, typically 1-3 years.

Product Warranty

The Company warrants its products against defects in materials and workmanship typically for a 1-2 year period from the date of shipment, though these terms may be negotiated on a case-by-case basis. A provision for estimated future costs related to warranty expenses is recorded when revenues are recognized. At both December 31, 2006 and 2005

the Company accrued $34,000 for warranty costs. This warranty reserve is based on the cost to replace a percentage of products in the field at a given point, adjusted by actual experience. Returns and allowances were not significant in any period reported, and form a data point in establishing the reserve. Should this warranty reserve estimate be deemed insufficient, by new information, experience, or otherwise, an increase to warranty expense would be required.

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Concentration of Credit Risk

Sales to three of the Company's customers accounted for 98%, 97% and 94% of the Company's total revenues for 2006, 2005 and 2004, respectively. The balance of Accounts Receivable from our top three customers was $2.5 Million and $1.7 Million as of December 31, 2006 and 2005, respectively. During 2006 the top three customers were Verizon Wireless, Alltel Corporation, and Bluegrass Cellular Corporation, respectively.

Advertising Costs

Advertising costs are charged to expense in the period incurred.

Research and Development Costs

Research and development costs related to both present and future products are charged to expense in the period incurred.

Net Loss Per Common Share

Basic and diluted net loss per common share are computed based upon the weighted average number of common shares outstanding. Approximately 5 million common shares issuable as of December 31, 2006 upon the exercise of options and warrants, and 9 million unvested shares of restricted stock, are not included in the per share calculations since the effect of their inclusion would be antidilutive.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Description of Certain Concentrations and Risks

The Company operates in a highly competitive and rapidly changing industry. Product revenues are currently concentrated with a limited number of customers, and the supply of certain materials is concentrated among a few providers. The development and commercialization of new technologies by any competitor could adversely affect the Company's results of operations.

Goodwill and Intangible Assets

Patents and trademarks represent costs, primarily legal fees and expenses, incurred in order to prepare and file patent applications related to various aspects of the Company's technology and to its current and proposed products. Patents and trademarks are recorded at cost and are amortized using the straight-line method over the shorter of their estimated useful lives or 17 years. The recoverability of the carrying values of patents and trademarks is evaluated on an ongoing basis by Company management. Factors involved in this evaluation include whether the item is in force, whether it has been directly threatened or challenged in litigation or administrative process, continued usefulness of the item in current and/or expected utilization by the Company in its solution offerings, perceived value of such material or invention in the marketplace, availability and utilization of alternative or other technologies, the perceived

protective value of the item, and other factors.

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During 2006 and 2005, the Company wrote off approximately $0 and $200,000, respectively, in patent-related costs. Total capitalized patent and trademark costs were approximately $841,000 and $844,000 at December 31, 2006 and 2005, respectively. Capitalized patent costs related to pending patents were approximately $289,000 and $266,000 at December 31, 2006 and 2005, respectively. Patents and trademarks were reported net of accumulated amortization of approximately $321,000 and $268,000 at December 31, 2006 and 2005, respectively.

As of the reporting date, the Company had recorded goodwill resulting from the acquisitions of Spectral Solutions, Inc. and the Adaptive Notch Filter division of Lockheed Martin Canada, Inc., both during 2000. Beginning January 1, 2002, goodwill is no longer to be amortized but rather to be tested for impairment on an annual basis and between annual tests whenever there is an indication of potential impairment. Impairment losses would be recognized whenever the implied fair value of goodwill is determined to be less than its carrying value. SFAS 142 prescribes a two-step impairment test to determine whether the carrying value of the Company's goodwill is impaired. The first step of the goodwill impairment test is used to identify potential impairment, while the second step measures the amount of the impairment loss. Step one to this test requires the comparison of the fair value of each reporting unit with its carrying amount, including goodwill. As the Company is comprised of a single reporting unit, the question of fair value is centered upon whether the market value, as measured by market capitalization, of the Company exceeds shareholders' equity. The excess of the Company's market capitalization over its reported shareholders' equity indicates that the goodwill of the Company's sole reporting unit was not impaired as of December 31, 2006 and 2005.

The Company's balances of Goodwill and Intangible Assets were as follows:

	Year Ended December 31,	
	2006	2005
	(in thousands of dollars)	
Patent, gross	$ 1,162	$ 1,112
Accumulated amortization	(321)	(268)
Other amortizable intangibles, net	$ 841	$ 844
Goodwill	$ 13,370	$ 13,370

The following table summarizes the estimated annual pretax amortization expense for the intangible assets with definitive lives:

2007	51
2008	51
2009	51
2010	51
2011	50
Thereafter	587
Total	$ 841

Fair Value of Financial Instruments

The carrying values of financial instruments, including accounts receivable, accounts payable, and long-term debt, approximates fair value.

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Long Lived Assets

In accordance with the provisions of SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate the carrying amount of the assets may not be fully recoverable. Under SFAS No. 144, an impairment loss is recognized when estimated undiscounted future cash flows expected to result from use of the asset and its eventual disposition are less than the carrying amount. Impairment, if any, is determined using discounted cash flows. The Company had no such impairment losses in 2006 or 2005.

Stock-Based Employee Compensation

In December 2004, the FASB issued SFAS No.123 (revised 2004), "Share-Based Payment" (SFAS No.123R). This statement requires that the compensation cost relating to share-based payment transactions be recognized in the financial statements. Compensation cost is to be measured based on the estimated fair value of the equity-based compensation awards issued as of the grant date. The related compensation expense will be based on the estimated number of awards expected to vest and will be recognized over the requisite service period (often the vesting period) for each grant. The statement requires the use of assumptions and judgments about future events and some of the inputs to the valuation models will require considerable judgment by management.

SFAS No.123(R) replaces FASB Statement No.123 (SFAS No.123), "Accounting for Share-Based Compensation," and supersedes APB Opinion No.25, "Accounting for Stock Issued to Employees." The provisions of SFAS No.123(R) are required to be applied by public companies that do not file as small business issuers, as of the first interim or annual reporting period that begins after June 15, 2005, and all other public companies as of the first interim or annual reporting period that begins after December 15, 2005. On April 14, 2005, the SEC adopted a new rule amending the effective date for Statement 123(R). Based on the amended rule, registrants were required to implement Statement 123(R) as of the first annual period beginning after June 15, 2005, which was January 1, 2006 for us.

On January 1, 2006, we adopted SFAS No.123(R), under the modified prospective application transition method without restatement of prior interim periods. This resulted in our recognizing compensation cost based on the requirements of SFAS No.123(R) for all equity-based compensation awards issued after the effective date of this statement. For all equity-based compensation awards that were unvested as of that date, compensation cost is recognized for the unamortized portion of compensation cost not previously included in the SFAS No.123 pro forma footnote disclosure. The adoption of SFAS No.123(R) had a material effect on the Company's results of operations with respect to equity issuances during 2006, with an equity compensation charge of $1.5 million during 2006.

The effects on earnings and earnings per share if the value recognition provisions of FAS 123(R) were applied to the twelve-month periods ended December 31, 2005 and 2004, respectively, is presented in the following tables:

In thousands of dollars:		Twelve months ended December 31, 2005		Twelve months ended December 31, 2004
Net loss, as reported	$	(2,977)	$	(6,967)
Deduct net change in stock-based employee compensation expense determined under fair-value-based method of all rewards, net of tax	$	(273)	$	(406)
Pro forma net loss	$	(3,250)	$	(7,373)
Pro forma net loss per share (basic)	$	(0.02)	$	(0.05)
Pro forma net loss per share (diluted)	$	(0.02)	$	(0.05)

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The following table summarizes the stock option activity during the fiscal year ended December 31, 2006:

Outstanding, December 31, 2005	8,146,000
Granted	-
Forfeited or canceled	(651,000)
Exercised	(2,583,000)
Outstanding, December 31, 2006	4,912,000

The fair value of each option grant was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions used for grants in 2005: no dividend yield, expected volatility of 105%, risk-free interest rate of 3.8%, and an expected life of 4 years. No options were granted during 2006.

At December 31, 2006, a total of 4.9 million stock options were outstanding under the Company's equity compensation plans, all but less than 0.1 million of which are fully vested. Stock-based compensation expense recognized during the fiscal year ended December 31, 2006 includes compensation expense for stock options granted prior to this period but not yet vested, based on the grant date fair value estimated in accordance with the pro forma provisions of FAS 123. Included in stock-based compensation expense for the fiscal year ended December 31, 2006 was $0.1 million related to stock options.

Restricted Share Rights

Restricted share grants offer employees the opportunity to earn shares of the Company's stock over time. Grants issued during 2006 generally vest over two years for employees and one year for non-employee directors. For grants during 2007 and beyond, we expect that the typical vesting period for employees will be four years while the vesting period for non-employee directors will remain tied to the one year service period (directors are elected annually by our shareholders). We recognize the issuance of the shares related to these stock-based compensation awards and the related compensation expense on a straight-line basis over the vesting period, or on an accelerated basis in those cases where the actual vesting is faster than the proportional straight line value. Included within these grants are also performance-based shares, that is, shares that vest based on accomplishing particular objectives as opposed to vesting over time. No performance-based shares were vested during the fiscal year ended December 31, 2006.

The following table summarizes the restricted stock award activity during 2006.

	Shares		**Weighted Average Grant Date Fair Value (per share)**
Outstanding, December 31, 2005	None		None
Granted	15,598,000	$	0.35
Forfeited or canceled	(3,097,000)	$	0.34
Vested	(3,787,000)	$	0.35
Outstanding, December 31, 2006	8,714,000	$	0.35

The total fair value of restricted shares vested during the fiscal year ended December 31, 2006 was $1.3 million. Total non-cash equity compensation expense recognized during the fiscal year ended December 31, 2006 was $1.6 million. Non-cash equity expense for the fiscal year ended December 31, 2006 included $1.3 million for vested restricted share grants, $0.1 million for the vesting of stock options awarded prior to 2006, and $0.2 million for the straight-line amortization of restricted share grants that did not vest during the fiscal year ended December 31, 2006.

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Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"). This statement defines fair value as used in numerous accounting pronouncements, establishes a framework for measuring fair value in generally accepted accounting principles ("GAAP") and expands disclosure related to the use of fair value measures in financial statements. SFAS 157 does not expand the use of fair value measures in financial statements, but standardizes its definition and guidance in GAAP. SFAS 157 is effective for fiscal years beginning after November 15, 2007. We plan to adopt the provisions of SFAS 157 on January 1, 2008. We are evaluating the potential impact of SFAS 157, but at this time do not anticipate that it will have an impact on our financial statements when adopted.

In September 2006, the Securities and Exchange Commission ("SEC") released Staff Accounting Bulletin No. 108, "Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements" ("SAB 108"). SAB 108 provides guidance on how the effects of the carryover or reversal of prior year financial statement misstatements should be considered in quantifying a current year misstatement. Prior practice allowed the evaluation of materiality on the basis of (1) the error quantified as the amount by which the current year income was misstated ("rollover method") or (2) the cumulative error quantified as the cumulative amount by which the current year balance sheet was misstated ("iron curtain method"). The guidance provided by SAB 108 requires both methods to be used in evaluating materiality. Immaterial prior year errors may be corrected with the first filing of prior year financial statements after adoption. The cumulative effect of the correction would be reflected in the opening balance sheet with appropriate disclosure of the nature and amount of each individual error corrected in the cumulative adjustment, as well as a disclosure of the cause of the error and that the error had been deemed to be immaterial in the past. We adopted SAB 108 for the year ended December 31, 2006, as required, and the adoption did not have a significant impact on our financial statements.

During July 2006, the FASB issued FIN 48, “Accounting for Uncertainty in Income Taxes,” which will impact the recognition, measurement, and disclosure of positions taken for income tax purposes. The Interpretation is effective for fiscal years beginning after December 15, 2006 (January 1, 2007 for us). Because we have historically posted losses and have maintained a full valuation allowance on our available future income tax benefit, we do not expect this Interpretation to have a material effect on our results of operations or financial position.

Reclassifications

Certain amounts reported in prior years have been reclassified from what was previously reported to conform to the current year’s presentation.

3. Realization of Assets

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America, which contemplate continuation of the Company as a going concern. However, the Company has sustained substantial losses from operations in recent years, and such losses have continued through the year ended December 31, 2006. In addition, the Company has used, rather than provided, cash in its operations. Consistent with these facts, the accompanying report from Grant Thornton, LLP, the Company’s independent registered public accounting firm, includes the comment that there is substantial doubt about the Company’s ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying balance sheet is dependent upon continued operations of the Company, which in

turn is dependent upon the Company's ability to meet its financing requirements on a continuing basis, to maintain present financing, and to succeed in its future operations. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be unable to continue in existence.

The Company has incurred, and continues to incur, losses from operations. For the years ended December 31, 2006, 2005, and 2004, the Company incurred net losses of $4.4 million, $3.0 million, and $7.0 million, respectively. During those years the Company implemented strategies to reduce its cash used in operating activities. The Company's strategy included the consolidation of its manufacturing and research and development facilities and a targeted reduction of the employee workforce, increasing the efficiency of the Company's processes, focusing development efforts on products with a greater probability of commercial sales, reducing professional fees and discretionary expenditures, and negotiating favorable payment arrangements with suppliers and service providers. More importantly, the Company configured itself along an outsourcing model, thus allowing for relatively large, efficient production without the associated overhead. The combination of these factors has been effective in bringing the Company closer to profitability (from a net loss as high as $28 million during 2001) while enabling it to deliver significant quantities of solutions. Beginning in 2005, the Company began to invest in additional product development (engineering) and sales and marketing resources as it began to increase its volume of business. While viewed as a positive development, these expenditures have added to the funding requirements listed above.

We believe that we have sufficient funds to operate our business until $11.3 million of our debt becomes due in August 2007. That debt is held by our two largest shareholders, including affiliates. While we expect to refinance this debt no such refinancing has occurred as of the reporting date, therefore, the ability to refinance our debt and maintain adequate working capital is necessary for us to continue as a going concern Additionally, we project increases in working capital requirements in order to pursue significant business opportunities during 2007 and beyond, and also expect to spend additional financial resources in the expansion of our business and product offerings. As such, we may require additional capital prior to August 2007. We intend to look into augmenting our existing capital position by continuing to evaluate potential short-term and long-term sources of capital whether from debt, equity, hybrid, or other methods. The primary covenant in our existing debt arrangement involves the right of the lenders to receive debt repayment from the proceeds of new financing activities. This covenant may restrict our ability to obtain additional financing or to apply the proceeds of a financing event toward operations until the debt is repaid in full.

4. Inventories

Inventories consist of the following:

	December 31, 2006	December 31, 2005
Raw materials	$ 2,675,000	$ 1,368,000
Work in process	2,332,000	443,000
Finished product	1,362,000	904,000
Total	$ 6,369,000	$ 2,715,000

Cost of product sales for the years ended December 31, 2006 and 2005 includes approximately $165,000 and $0, respectively, of costs in excess of the net realizable value of inventory (including obsolete materials).

Inventory balances are reported net of a reserve for obsolescence. This reserve is computed by taking into consideration the components of inventory, the recent usage of those components, and anticipated usage of those components in the future. At December 31, 2006 and 2005, those reserves were approximately $325,000 and $160,000, respectively.

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	For the Years Ended December 31,		
	2006	2005	2004
	(in thousands of dollars)		
Beginning Balance	$ 160	$ 218	$ 858
Inventory Obsolescence Expense	165	-	57
Inventory Written Off	-	58	697
Recoveries	-	-	-
Ending Balance	$ 325	$ 160	$ 218

5. Allowance for Doubtful Accounts

	For the Years Ended December 31,		
	2006	2005	2004
	(in thousands of dollars)		
Beginning Balance	$ 0	$ 0	$ 4
Bad Debt Expense	-	-	-
Accounts Written Off	-	-	-
Recoveries	0	0	4
Ending Balance	$ 0	$ 0	$ 0

6. Capital Stock

The Company has an authorized class of undesignated preferred stock consisting of 300,000 shares. Preferred stock may be issued in series from time to time with such designations, relative rights, priorities, preferences, qualifications, limitations and restrictions thereof, to the extent that such are not fixed in the Company's certificate of incorporation, as the Company's Board of Directors ("Board of Directors" or "Board") determines.

On February 9, 1996, the Board of Directors adopted a shareholder rights plan (the "Rights Plan"). In conjunction with the adoption of the Rights Plan, the Company created one series of preferred stock, consisting of 10,000 shares of Series A Junior Participating Preferred Stock ("Series A Preferred"). Each share of Series A Preferred entitled the holder to receive dividends equal to 1,000 times the dividends per share declared with respect to the Company's common stock and, in the event of liquidation, such holders would have received a preference of 1,000 times the aggregate amount to be distributed per share to the holders of the Company's common stock. Pursuant to the Rights Plan, a Series A Right was associated with, and would have traded with, each share of common stock outstanding. This Rights Plan expired during February 2006.

At December 31, 2006, authorized but unissued shares of common stock have been reserved for future issuance as follows:

Options outstanding (Note 7)	4,912,000

At December 31, 2006, 8.7 million shares of restricted stock had been issued but had not vested.

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7. Stock Options and Warrants

On August 19, 1993, the Board of Directors adopted the 1993 Stock Option Plan for employees, consultants, and directors who were not also employees of the Company (outside directors). This plan reached its ten-year expiration during 2003. During the 2003 annual meeting of shareholders, the Company's shareholders approved a new 2003 Equity Incentive Plan to take the place of the expiring 1993 plan. Unissued options from the 1993 plan were used to fund the 2003 plan. During the 2005 annual meeting of shareholders, the Company's shareholders approved 12 million additional shares of stock to be included in the 2003 Plan, and clarified the ability for the 2003 Plan to utilize up to 5 million unused shares originally allocated to the 1993 Plan. The maximum number of shares issuable under these plans is 26,011,468. These Plans are collectively referred to as the "Plan".

For employees and consultants, the Plan provides for granting of restricted shares of stock, Incentive Stock Options (ISOs) and Nonstatutory Stock Options (NSOs). In the case of ISOs, the exercise price shall not be less than 100% (110% in certain cases) of the fair value of the Company's common stock, as determined by the Compensation Committee or full Board as appropriate (the "Committee"), on the date of grant. In the case of NSOs, the exercise price shall be determined by the Committee, on the date of grant. The term of options granted to employees and consultants will be for a period not to exceed 10 years (five years in certain cases). Options granted under the Plan default to vest over a four-year period (one-fourth of options granted vest after one year from the grant date and the remaining options vest ratably each month thereafter), but the vesting period is determined by the Committee and may differ from the default period. In addition, the Committee may authorize option and restricted stock grants with vesting provisions that are not based solely on employees' rendering of additional service to the Company.

For outside directors, the Plan provides that each outside director will be automatically granted NSOs on the date of their initial election to the Board of Directors. On the date of the annual meeting of the stockholders of the Company, each outside director who is elected, reelected, or continues to serve as a director, shall be granted additional NSOs, except for those outside directors who are first elected to the Board of Directors at the meeting or three months prior. The options granted vest ratably over one or two years, based on the date of grant, and expire after ten years from the grant date. Beginning in 2006, the Compensation Committee of the Board approved grants of Restricted Stock to be used as compensation for outside directors in lieu of NSO's.

During 2005, the Board elected to utilize a transition rule provided under FAS 123R, and accelerated the vesting to December of 2005 a total of 364,198 options that were priced above the Company's stock price (i.e., "out of the money" options) and scheduled to vest after 2005. There was no compensation expense recognized upon the acceleration of the options in 2005. The majority of these accelerated options were scheduled to vest during the first quarter 2006. By employing this method, these options are excluded from the Company's FAS 123R calculation in 2006, but are included in the FAS 148 pro forma disclosure presented in Note 2. Beginning in 2006, the Board began providing restricted stock grants in lieu of stock options within both employee and non-employee compensation programs. The impact of the new accounting standard, industry trends, and the ability to use fewer shares to achieve intended results are a few of the reasons behind this change in view. The Board has also expressed an intention to continue to utilize performance-based equity incentives for more cases of equity compensation than in years past.

The fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted-average assumptions for the years ended December 31, 2005 and 2004: risk-free interest rate of 4.1% and 2.7%, respectively; a dividend yield of 0%; annual volatility factor of the expected market price of the Company's common stock of 0.85 and 1.14, respectively (the daily "volatility", which is measured as the standard deviation of the closing stock price for the same periods, would be 0.05 and 0.10); and expected life of the options of 4.0 years. No options were issued during 2006.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

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The table below summarizes all option activity during the three year period ended December 31, 2006:

	Options Outstanding		Exercise Price Per Share
Outstanding at December 31, 2003	6,660,000	$	0.11 —21.50
Granted	4,540,000	$	0.14 — 0.89
Exercised	(1,046,000)	$	0.11 — 0.49
Forfeited	(1,095,000)	$	0.11 — 21.50
Outstanding at December 31, 2004	9,059,000	$	0.11 — 18.25
Granted	2,815,000	$	0.25 — 0.43
Exercised	(2,038,000)	$	0.11 — 0.14
Forfeited	(1,690,000)	$	0.11 — 18.25
Outstanding at December 31, 2005	8,146,000	$	0.11 — 18.25
Granted	-		
Exercised	(2,583,000)	$	0.11 - 0.39
Forfeited	(651,000)	$	0.25 - 18.25
Outstanding at December 31, 2006	4,912,000	$	0.11 - 1.81

The weighted-average exercise price of options outstanding at December 31, 2006, 2005 and 2004, was $0.41, $0.28, and $0.40, respectively. The weighted-average exercise price of options granted, exercised, and forfeited during 2006 was N/A, $0.35 and $0.95, respectively. The weighted-average fair value of options granted during 2006, 2005 and 2004 was N/A, $0.36, and $0.18, respectively. No stock option grants were issued during 2006.

Following is additional information with respect to options outstanding at December 31, 2006:

		$0.11 to $0.22		$0.24 to $0.43		$0.45 to $1.81
OUTSTANDING AT DECEMBER 31, 2006						
Number of options		1,145,000		2,755,000		1,012,000
Weighted-average exercise price	$	0.14	$	0.35	$	0.89
Weighted-average remaining contractual life in years		7		7		4
EXERCISABLE AT DECEMBER 31, 2006						
Number of options		1,104,000		2,755,000		1,012,000
Weighted-average exercise price	$	0.14	$	0.35	$	0.89

The total number of unvested options outstanding at December 31, 2006 was less than 0.1 million, which will vest based on employees' continued service to the Company.

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8. Long-Term Debt

Uncommitted Line of Credit (2002 Credit Line)

As of the reporting date, we have drawn $8.5 million of debt financing under a credit line, as described below. During October 2002, we entered into an uncommitted line of credit with our two largest shareholders, an affiliate of Elliott Associates, L.P. (Manchester Securities Corporation) and Alexander Finance, L.P. This line initially provided up to $4 million to us. This line was uncommitted, such that each new borrowing under the facility would be subject to the approval of the lenders. Borrowings on this line bore an initial interest rate of 9.5% and were collateralized by all the assets of the Company. Outstanding loans under this agreement would be required to be repaid on a priority basis should we receive new funding from other sources. Additionally, the lenders were entitled to receive warrants to the extent funds were drawn down on the line. The warrants bore a strike price of $0.20 per share of common stock and were to expire on April15, 2004. The credit line was to mature and be due, including accrued interest thereon, on March 31, 2004. Due to a subsequent agreement between the parties no warrants were issued with subsequent borrowings.

According to existing accounting pronouncements and SEC guidelines, we allocated the proceeds of these borrowings between their debt and equity components. As a result of these borrowings during 2002, we recorded a non-cash charge of $1.2 million through the outstanding term of the warrants (April, 2004). $250,000 and $862,000 of that amount were recorded during 2004 and 2003, respectively. These warrants were valued at $1.2 million of the $2 million debt instrument based on a Black-Scholes valuation that included the difference between the value of our common stock and the exercise price of the warrants on the date of each warrant issuance and a 30% discounted face value of the notes, leaving the remaining $0.8 million as the underlying value of the debt. This $1.2 million was amortized over the vesting period of the warrants (six quarters from the fourth quarter 2002 through the first quarter 2004).

During October 2003, we entered into an agreement with our lenders to supplement the credit line with an additional $2 million, $1 million of which was drawn immediately and $1 million subsequently drawn upon our request and subject to the approval of the lenders. This supplemental facility bore a 14% rate of interest and was due October 31, 2004. The term of the previous credit line was not affected by this supplement, and as such the $4 million borrowed under that line, plus accrued interest, remained due March 31, 2004.

During February 2004, the credit line was extended to a due date of April 2005, with interest after the initial periods to be charged at 14%. No warrants or other inducements were issued with respect to this extension. Additionally, lenders exercised their 10 million warrants during February 2004, agreeing to let us use the funds for general purposes as opposed to repaying debt.

During July 2004, we and our lenders agreed to increase the aggregate loan commitments under the credit line from $6,000,000 to $6,500,000. Simultaneously, we drew the remaining $1,500,000 of the financing.

During November 2004, we and our lenders agreed to increase the line of credit to up to an additional $2 million to an aggregate loan commitment of $8,500,000, $1 million of which was drawn immediately by us with the remaining $1 million drawable upon our request and subject to the approval of the lenders, which occurred during January 2005.

During February 2005, the credit line was extended until April 2006. Interest during the extension period was to be charged at 9%. No warrants or other inducements were issued with respect to this extension.

On August 2, 2005, we and our lenders agreed to extend the due date from April 2006 until August 2007, and the lenders also agreed to waive the Company's obligation to repay its debt with proceeds from an equity financing transaction with its lenders, including affiliates, in August 2005. No warrants or other inducements were issued as a result of this transaction.

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2006 Convertible Debt

During June 2006 we entered into a Securities Purchase Agreement (the "Agreement") and convertible notes (the "Notes") with Alexander Finance, L.P., and Manchester Securities Corporation L.P. (together, the "Lenders"), pursuant to which the Lenders have agreed, to each loan us $2,500,000, or an aggregate of $5,000,000, in convertible debt. The Lenders, including affiliates, are our two largest shareholders and the lenders of the 2002 Credit Line referenced above. The transaction was structured as a private placement of securities pursuant to Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act") and Rule 506 promulgated thereunder.

The Notes will mature on June 22, 2010 and bear an interest rate of 5% due at maturity. Both the principal amount and any accrued interest on the Notes are convertible into our common stock at a rate of $0.33 per share, subject to certain anti-dilution adjustments. The Lenders have the right to convert the Notes, both principal and accrued interest, into shares of common stock at the rate of $0.33 per share at any time. We have the right to redeem the Notes in full in cash at any time beginning two years after the date of the Agreement. The conversion rate of the Notes will be subject to customary anti-dilution protections, provided that the number of additional shares of common stock issuable as a result of changes to the conversion rate will be capped so that the aggregate number of shares of common stock issuable upon conversion of the Notes will not exceed 19.99% of the aggregate number of shares of common stock presently issued and outstanding.

The Notes are secured on a first priority basis by all of our intangible and tangible property and assets. Payment of the Notes is guaranteed by our two inactive subsidiaries, Spectral Solutions, Inc. and Illinois Superconductor Canada Corporation. The Agreement contains customary representations, warranties and covenants. We filed a registration statement covering the resale of the shares of common stock issuable upon conversion of the Notes with the Securities and Exchange Commission Concurrently with the execution of the Agreement, the Lenders have waived their right under the 2002 Credit Line to receive the financing proceeds from the issuance of the Notes, allowing us to use the funds for product development or general working capital purposes. No fees were paid to any financial advisor, placement agent, broker or finder in connection with the transactions contemplated by the Agreement and the Notes.

Assuming the Notes are held for the full four year term, 18,505,719 shares of common stock would be required upon settlement, for both principal and interest. This amount is approximately 10% of the then approximately 186 million shares of common stock currently issued and outstanding. As of December 31, 2006, the Lenders, including their affiliates, owned approximately 43% of the Company's outstanding shares. As a result of this transaction, the combined holdings of the Lenders would be approximately 48% of the Company's outstanding common stock.

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9. Income Taxes

The Company has net operating loss carryforwards for tax purposes of approximately $137,002,000 at December 31, 2006. The net operating loss carryforwards expire in the following years:

Year		Amount
2007		974,000
2008		1,658,000
2009		3,973,000
2010		8,199,000
2011		11,953,000
2012		11,922,000
2018		11,146,000
2019		10,726,000
2020		15,501,000
2021		24,904,000
2022		13,982,000
2023		5,284,000
2024		9,758,000
2025		3,371,000
2026		3,651,000
Total	$	137,002,000

A reconciliation of income tax expense at the statutory rate to the Company's actual income tax expense is shown below:

	2006	2005	2004
Tax benefit computed at the Federal statutory rate	34.00%	34.00%	34.00%
Increase (decrease) in taxes due to:			
Change in valuation allowance	-38.80%	-38.80%	-38.80%
State taxes, net of Federal benefit	4.80%	4.80%	4.80%

Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31, 2006	December 31, 2005
Deferred tax assets		
Net operating loss carryforward	$ 52,061,000	$ 50,490,000
Accrued liabilities	1,223,000	840,000
Inventories	124,000	61,000
Property and Equipment	893,000	893,000
Total defer		