

ISCO INTERNATIONAL INC  
Form 10-K  
March 31, 2006  
Table of Contents

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 10-K**

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(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**  
for the fiscal year ended December 31, 2005

or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**  
for the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 0-27718

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**ISCO INTERNATIONAL, INC.**

(Exact name of registrant as specified in its charter)

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Delaware  
(State or other jurisdiction of  
incorporation or organization)

36-3688459  
(I.R.S. Employer  
Identification No.)

1001 Cambridge Drive

60007

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Elk Grove Village, Illinois  
(Address of principal executive offices)

(Zip Code)

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

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

Common Stock, Par Value \$0.001 Per Share and

associated Preferred Stock Purchase Rights  
(Title of each class)

American Stock Exchange  
(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)

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

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

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  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

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

As of June 30, 2005, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$26.7 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 60 million shares held by directors, executive officers, and two holders of more than 10% of the registrant's common stock.

As of March 1, 2006, there were 183,507,236 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 2006 Annual Meeting of Stockholders to be held on June 16, 2006 are incorporated by reference in Part III of this Annual Report on Form 10-K.



**Table of Contents**

**TABLE OF CONTENTS**

<b><u>PART I</u></b>		
Item 1.	<u>Business</u>	1
Item 1A.	<u>Risk Factors</u>	6
Item 1B.	<u>Unresolved Staff Comments</u>	11
Item 2.	<u>Properties</u>	11
Item 3.	<u>Legal Proceedings</u>	11
Item 4.	<u>Submission of Matters to a Vote of Security Holders</u>	12
<b><u>PART II</u></b>		
Item 5.	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	13
Item 6.	<u>Selected Financial Data</u>	13
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results Of Operations</u>	15
Item 7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	19
Item 8.	<u>Financial Statements and Supplementary Data</u>	20
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	37
Item 9A.	<u>Controls and Procedures</u>	37
Item 9B.	<u>Other Information</u>	37
<b><u>PART III</u></b>		
Item 10	<u>Directors and Executive Officers of the Registrant</u>	38
Item 11	<u>Executive Compensation</u>	38
Item 12	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	38
Item 13	<u>Certain Relationship and Related Transactions</u>	38
Item 14	<u>Principal Accountant Fees and Services</u>	38
<b><u>PART IV</u></b>		
Item 15.	<u>Exhibits and Financial Statement Schedules</u>	38

**Table of Contents**

**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 provider to a customer-driven provider of more specialized 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 its 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 are focusing our continuous efforts on winning the support of the world's leading wireless operators for our RF management solutions. We believe that our ANF and RF<sup>2</sup> product families, as well as professional service support and other products, make us a preeminent RF management specialist in the market.

We currently outsource production for our products. We believe that we can maintain or achieve targeted product gross margins and minimize capital needs while reducing product costs. We also believe that offering the lowest product cost will further strengthen our ability to achieve our strategic objectives.

**LINK ISSUES, INCLUDING INTERFERENCE, AND WIRELESS SYSTEMS**

Link issues are a growing problem limiting cell site coverage, capacity and range, as well as mobile transmit power and related battery-life issues. 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 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.

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 new 3G equipment. Additionally, the recent increase in merger activity will force merged companies to integrate disparate technology

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platforms. 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 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 that 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.

-1-

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## **Table of Contents**

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

### **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 the Cellular Telecommunications & Internet Association, minutes per user per month increased from 136 minutes in 1998 to 403 minutes in 2002. The same source indicates that total cell phones in use in the United States increased from 4 million in 1990 to 168 million during 2004. According to industry sources, the worldwide number of subscribers using mobile wireless networks increased from 308 million in 1998 to 1 billion in 2004, representing an annual compound growth rate of 21%. The number of handsets sold during 2005 has been reported to exceed 800 million 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, wireless consumer appliances and radar, 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 will require smaller operating cells and more base stations than existing cellular networks in order to cover the same geographic area. This is based on the requirement for a higher quality radio link in order to enable full 3G throughputs required by the most popular applications. It is also based upon an 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 amount 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. 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. The Company's 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.

## **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 (inband 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 components which block or mitigate the impact of interference, optimize signal processing within the radio path while introducing very little signal loss or degradation.

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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 (RF<sup>2</sup> ), 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.

### **RF<sup>2</sup> (Radio link Radio Frequency Fidelity)**

We introduced our RF<sup>2</sup> products in September 2003, we began to add new products to our RF<sup>2</sup> family in 2004, and added a significant number of products in 2005. The RF<sup>2</sup> 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 RF<sup>2</sup> 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 RF<sup>2</sup> 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.



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## **Table of Contents**

Our RF<sup>2</sup> products are easy to install, maintenance-free, and a fraction of the cost of more exotic solutions such as HTS. Additionally, our RF<sup>2</sup> solution has been shown to deliver results generally comparable to HTS-based solutions without a cryogenic cooler or other moving parts. We believe that the ease of integration and value compete strongly with these and other solutions.

### **RF<sup>2</sup> 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 ), 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.

### **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 and capacity. 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 current product is focused on CDMA networks. A product evolution path is planned to extend the range of applications into wide-band spread spectrum systems (W-CDMA), including, for example, upgrades of GSM systems to UMTS and similar 3G technology. During the first quarter of 2006, we launched our first ANF solution that protects PCS (1900 MHz). This solution features 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;

Observe interference and notch activity from all units; and

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 the following 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 combination 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.

*ANF competition*

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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.

### *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.

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## **Table of Contents**

### *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 very 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.

## **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.

***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 can extend the radio link range of a wireless system by up to 30% or more. 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**

Until recently, we had 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.

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Recently, we started targeting 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. 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 97% and 94% of our total revenues for 2005 and 2004, respectively. During 2005, 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 2005 was roughly twice the 2004 amount, reflecting a continued expansion in our customer base.

### **Manufacturing**

We emphasize the outsourcing of 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.

## **Table of Contents**

### **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 2003, 2004 and 2005 were approximately \$988,000, \$1,119,000, and \$1,767,000, 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.

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 12, 2006, we had a total of 30 employees, 10 of whom hold advanced degrees. Of the employees, 3 are engaged in manufacturing and production, 12 are engaged in research, development and engineering, and 10 are engaged in marketing and sales, and 5 are engaged in

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finance and administration. We also periodically employ other consultants and independent contractors on an as-needed basis. None of our employees are covered by a collective bargaining agreement. We believe that our relationship with our employees is good.

-5-

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**Table of Contents**

**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 expectations and are based 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 2006 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 prospectus or to reflect the occurrence of unanticipated events.

**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, 2005, the accumulated deficit was approximately \$160 million. We have only recently begun to generate revenues from the sale of our ANF and RF<sup>2</sup> products. Accordingly, although we showed a substantial improvement in revenue and net result in 2005 and we have indicated the expectation of continued improvement during 2006, 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 as it was managed during 2005 through 2006. However, we project increases in working capital requirements in order to pursue significant business opportunities during 2006 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 during the second half of 2006. 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 apply the proceeds of a financing event toward operations until the debt is repaid in full.

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, 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 an outsourcing arrangement with a qualified manufacturer that will allow us the same. 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 enter into a manufacturing arrangement on acceptable terms with a qualified manufacturer, 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.



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## **Table of Contents**

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 its 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.

## **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, 1999 and through December 31, 2005, the closing price of our common stock has ranged from a low of \$0.11 per share and high of \$29.38 per share while the trading price generally ranged from a low of \$0.10 per share to a high of \$39.00 per share during this time. However, our common stock has not traded above \$0.52 per share during 2005. 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, 2005, we had outstanding options to purchase 8.1 million shares of common stock at a weighted average exercise price of \$0.28 per share (1.0 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. During December 2005, our shareholders voted to increase the number of shares reserved for issuance under the 2003 Equity Incentive Plan by 12 million, and clarified that shares allocated to the 1993 Stock Option Plan but were ultimately unused were to be available for use under the 2003 Equity Incentive Plan, up to a maximum of 5 million shares. In order to attract and retain key personnel, we may issue additional securities, including stock options and 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 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 45% of the outstanding voting power. 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**

In February 1996, our Board of Directors adopted a shareholders' rights plan, commonly known as a poison pill, which had a potential anti-takeover effect in that the plan might have delayed, deferred or prevented a change of control of us. This plan expired in February 2006. However, there exist certain other 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.

**Reporting requirements of a public company**

As a public company, we are required to comply with the reporting obligations of the Exchange Act and may be required to comply with Section 404 of the Sarbanes-Oxley Act for our fiscal year ending December 31, 2007. 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.

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## **Table of Contents**

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 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 RF<sup>2</sup> 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 year, including the best four revenue quarters in our history during 2005, there is no assurance that we will continue to receive orders from these customers.

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

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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.

## **Table of Contents**

### **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.

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 increasing 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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**Table of Contents**

**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.

**Litigation**

We have no active lawsuits, nor any pending to the best of our knowledge. 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

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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

## **Table of Contents**

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.

## **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 will complement or enhance our current product or services offerings. At present, no agreements or other 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 and marketing activities. We believe that this facility is 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**

#### **Patent Litigation (concluded)**



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On February 3, 2005, the Appellate Court issued its ruling in our suit in the United States District Court for the District of Delaware against Conductus, Inc. and Superconductor Technologies, Inc. alleging infringement of U.S. Patent No. 6,263,215, entitled "Cryoelectronically Cooled Receiver Front End for Mobile Radio Systems" (the "215 patent"). The Appellate Court did not find adequate grounds for reversal of the Trial Court decision, and thus maintained the verdict in favor of the defendant in allowing the patent to remain invalid and unenforceable and in favor of us in denying counterclaims for damages raised by the defendant. The Trial Court had overturned the jury's determination of unfair competition on our part and denied all requests for damages, including the \$3.87 million jury award. The Trial Court did not, however, overturn the jury determinations of patent invalidity and unenforceability based on inequitable conduct and denied our motion for a new trial. The Appellate Court's ruling concluded this matter.

**Table of Contents**

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

At our annual meeting of shareholders held on December 9, 2005, the following proposals were approved by the margins indicated:

	Number of Shares	
	Voted For	Withheld
1. To elect eight (8) Directors, to serve for one year and until a successor is elected and qualified:		
Mr. John Thode	173,390,268	1,731,778
Mr. Stuart Chase Van Wagenen(1)	172,840,913	2,281,133
Dr. Amr Abdelmonem	173,333,743	1,788,303
Dr. George Calhoun	172,397,631	2,724,415
Mr. Mike Fenger	173,271,496	1,850,550
Mr. Jim Fuentes	173,269,591	1,852,455
Mr. Ralph Pini	173,258,696	1,863,350
Mr. Tom Powers	173,203,246	1,918,800

	Number of Shares			Broker
	Voted For	Against	Abstain	
2. To approve amendments to our 2003 Equity Incentive Plan	28,877,726	3,869,889	684,624	141,689,807
3. To ratify the appointment of Grant Thornton LLP as the independent auditors of our financial statements for the fiscal year ending December 31, 2005.	173,614,480	1,315,152	192,414	0

(1) Mr. Van Wagenen subsequently resigned from the Board of Directors on January 12, 2006.

**Table of Contents**

**PART II**

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

The common stock has been quoted since June 2002 on the American Stock Exchange under the symbol ISO. Prior to that, and until April 1999, the stock had been quoted on the OTC Bulletin Board under the symbol ISCO. From 1993 until April 1999, the common stock was quoted 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.

	<b>High</b>	<b>Low</b>
<b>FISCAL YEAR ENDING DECEMBER 31, 2004</b>		