FLEXPOINT SENSOR SYSTEMS INC
Form 10-K
April 09, 2010

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2009**

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES AND EXCHANGE ACT OF 1934

For the transition period___to___

Commission file number: **No. 0-24368**

FLEXPOINT SENSOR SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

87-0620425

(I.R.S. Employer Identification No.)

106 West Business Park Drive, Draper, Utah

(Address of principal executive offices)

84020

(Zip Code)

Registrant s telephone number, including area code**:** **801-568-5111**

Securities registered under Section 12(b) of the Exchange Act: **None**

Securities registered under Section 12(g) of the Exchange Act: **Common Stock**

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 15(d) of the Exchange Act.

Yes [ ] No [X]

Indicate by check mark whether the registrant (1) 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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [ ] No [ ]

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

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

Large accelerated filer [ ]

Non-accelerated filer [ ]

Accelerated filed [ ]

Smaller reporting company [X]

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, as of the last business day of the registrant s most recently completed second fiscal quarter was $3,372,044

The number of shares outstanding of the registrant s common stock, as of March 27, 2010, was 26,580,887.

Documents incorporated by reference: None

TABLE OF CONTENTS

PART I

In this annual report references to Company , Flexpoint , Flexpoint Sensor, we, us, and our refer to Flexpoint Sensor Systems, Inc. and its subsidiaries.

FORWARD LOOKING STATEMENTS

The Securities and Exchange Commission (SEC) encourages companies to disclose forward-looking information so that investors can better understand future prospects and make informed investment decisions. This report contains these types of statements. Words such as may, will, expect, believe, anticipate, estimate, project, or conti comparable terminology used in connection with any discussion of future operating results or financial performance identify forward-looking statements. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this report. All forward-looking statements reflect our present expectation of future events and are subject to a number of important factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements.

PART I

ITEM 1. BUSINESS

HISTORICAL DEVELOPMENT

Flexpoint Sensor Systems, Inc. was incorporated in the state of Delaware in June 1992 as Nanotech Corporation. In April 1998, Nanotech acquired Sensitron, Inc., a Utah corporation (Sensitron), as a wholly-owned subsidiary through a reverse triangular merger. Nanotech also acquired Sensitron s wholly-owned subsidiary, Flexpoint, Inc. As part of this acquisition, Nanotech changed the company name to Micropoint, Inc. In July 1999 Micropoint changed its name to Flexpoint Sensor Systems, Inc.

Flexpoint was forced to seek bankruptcy protection on July 3, 2001, and filed a voluntary petition for reorganization pursuant to Chapter 11 of the United States Bankruptcy Code. On February 24, 2004, the bankruptcy court confirmed our Plan of Reorganization. As a result of our reorganization, we are now a development stage company with a date of emergence from bankruptcy of February 24, 2004. We used fresh-start reporting and all assets of Flexpoint Sensor Systems, Inc. were restated to reflect their reorganization value, which approximated the fair value at the date of reorganization.

BUSINESS OVERVIEW

Flexpoint Sensor Systems, Inc. (Flexpoint , or Company), is a development stage company principally engaged in designing, engineering and manufacturing bend sensor technology and equipment using its patented Bend Sensor®

technology, (a flexible potentiometer technology). For the past three years we have been negotiating and signing contracts, manufacturing Bend Sensor® devices and related products and making further improvements to our technologies and processes. We own nine patents and have filed for additional patents and are in the process of filing for more. The Company currently manufactures, or is jointly developing, five products that are being sold and supplied to current customers. We are working towards continued expansion of our customer base and the Company markets to a number of users and is in the process of furthering its marketing effort for products that the Company can produce. We anticipate having as many as 15 to 20 different products featuring our patented Bend Sensor® technology on the market over the next 12 to 18 months.

In addition to the sale of its products and services the Company may generate revenues through licensing its technology for field of use or territory. If at all possible, each license agreement will require either first right of refusal to manufacture, or royalty provisions on each product application. We are currently concentrating our marketing efforts on smaller contracts and production orders to generate immediate revenue and improve the Company's cash flow. The Company continues to market its automotive and medical applications and devices. Due to their size and regulations these industries require a significantly longer time to develop and acquire approvals for new technologies but because of the high volumes associated within these industries they will potentially generate long term revenue streams for the Company.

On September 11, 2008 R&D Products, LLC entered into a long-term Licensing Agreement for their bed technology with a major medical solutions provider, (Licensee). The Agreement provides the Licensee the exclusive world wide rights to R&D s patented bed technology for medical applications. On that same day, R&D Products, the Licensee and Flexpoint entered into a long-term joint manufacturing agreement for R&D s bed technology and related products. The manufacturing agreement provides for the Company to manufacture sensors for the bed technology and related products through 2018 with an option to renew each year thereafter. During 2009 the Licensee went through a series of reorganizations that affected its engineering and senior management team. Therefore the ramp up and production schedules and deadlines with resource requirements are being renegotiated. The Licensee continues to be committed to this product and has invested significant money and resources to the project over the past year and continues to work closely with R&D and Flexpoint to bring this product to market as soon as possible. Management anticipates the volumes associated with this contract would be sufficient to support our operations in the future, but the Company will need additional financing to meet our short term cash requirement, therefore, we are actively seeking financing and are working on various short-term manufacturing contracts for the use of, design and engineering of, our Bend Sensor® flexible potentiometer application.

The Company continues to work with various Tier 1 (major suppliers) automotive suppliers on a variety of products that are in various stages of development and implementation. Both the medical and automotive industries have undergone significant changes due to the current economic and political uncertainties over the past two years. These uncertainties have created delays in the implementation of the Company's automotive and medical devises and therefore, the Company has focused its marketing efforts and resources on sensors and products that in the aggregate will generate smaller dollar volume than those anticipated from their medical or automotive devises, but are quicker to market and will generate immediate cash flow.

PRINCIPAL PRODUCTS

Bend Sensor® Technology

The Company owns the patent rights to our Bend Sensor® technology through Sensitron, a wholly-owned subsidiary of the Company. The Bend Sensor® is a flexible potentiometer bend sensor product consisting of a coated substrate, such as plastic, that changes electrical conductivity as it is bent. Electronic systems can connect to this sensor and measure in detail the amount of bending or movement that occurs in a predictable manner. Certain applications of the Bend Sensor® potentiometer have been patented (See Patents and Intellectual Property, below).

A typical potentiometer functions through the means of metal contacts swiping or rubbing across a resistive element. Our Bend Sensor® potentiometer is a single layer with no mechanical assembly that makes it more reliable and significantly smaller, lighter in weight and usually less expensive than mechanical potentiometers. Management believes many sensor applications can be improved using our technology and the use of our technology will result in new products and new sensor applications.

We have developed the following applications and devices for the Bend Sensor® technology:

Medical Bed

Under the terms of our agreement with R&D Products LLC, we have delivered and are scheduled to deliver additional bed prototypes for use in medical and commercial applications. As design changes and enhancements are approved and implemented, we anticipate delivery of additional prototypes during 2010. The electronics of the bed are able to determine, based on our Bend Sensor® technology input, the position of the person on the bed and how they are moved. The bed has the ability to roll a patient left or right to relieve pressure areas as well as facilitate dressing changes. This allows needed adjustments to be made to meet the required standards of care and comfort. Adjustments are also programmable for customized patient care. R&D Products has licensed the exclusive worldwide technology and patent rights for the bed s medical application which is designed to manage pressure on the body using Flexpoint Sensor Systems Bend Sensor® technology. Management believes this application of our technology is sufficiently unique to provide a major source of future revenues.

Automotive Products

From 2007 through 2009 we have been in negotiations with several Tier 1 suppliers and OEMs in the automotive industry on the following products:

Variable Speed Seat Switch

The variable speed switch controls the position of an automotive seat. The Company has patents pending on the seat switch. The Company is currently working with several Tier-1 suppliers and manufactures who have expressed interest in the concept. Assuming the product is accepted into a platform; volumes for the seat switch are expected to be several million units over a 3 year period of time and should grow as acceptance of the product occurs. As well as adding the variable speed feature, the seat switch assembly weighs less than the assemblies currently in use and fits within the emphasis of automotive manufactures towards lighter, more fuel efficient cars.

Comfort Seats

The Company is developing an advanced comfort seat for automobiles utilizing their patented Bend Sensor® technology. Indications of interest have been received from Tier 1 suppliers and Flexpoint is working to obtain joint development agreements for the concept. There has been significant interest in the concept and it appears that the timing is good for this type of a product.

Seat Belt Reminder

As a result of our testing in the pedestrian impact detection market, we have developed and tested a Seat Belt Reminder (SBR) sensor that alerts the occupant of an automobile to fasten his/her seatbelt. We are currently working with multiple manufacturers to potentially replace existing devices in the marketplace with a system superior in performance and at a lower price point.

The Passenger Presence Detection system is used to detect if there is any object in the front passenger seat. This device could be used widely in the European market because there are specific requirements for this type of application in Europe. We are currently working with Tier 1 suppliers on this application. This device could also be used as a seat belt reminder with a potential market of 12 to 13 million vehicles in the U.S. per year.

Pedestrian Impact Detection Sensor

In 2003, the European Parliament and the Council of the European Union published a directive on pedestrian protection to reduce the number of pedestrian deaths and injuries. In October 2005 we completed the initial stage of testing for our Pedestrian Impact Detection (PID) system with Tier One suppliers and confirmed the system s ability to distinguish within milliseconds between a human leg and an inanimate object. During 2006 four separate automotive suppliers/original equipment manufacturers tested the Bend Sensor® device for use in pedestrian impact detection device. The tests proved that the Bend Sensor® device was able to detect impact with a human leg and in the event of an accident, trigger a desired safety response. The device is also capable of differentiating between a human leg and a steel post and can therefore alter the safety response based on the appropriate safety protocols.

We have also developed a crash sensor, which is a series of sensors mounted in strategic places on the side and door panels to detect an impact, as well as the speed, direction and force of the impact. This allows an onboard computer to deploy side air bags where needed.

In 2006 we enlisted a third party testing facility to further validate our technology as required in our protocol for Stage II development of our devices. In June 2006 we announced our PID system was tested by MGA Research and this research confirmed results of our internal testing. The system is placed in the vehicle's front bumper to detect crash impact. Within milliseconds of contact, the system can differentiate between a human leg and an inanimate object and trigger a safety response in accordance with the manufacturer s specifications.

Theater Seats

Similar to a seat belt reminder, this devise monitors cinema theater s paying customers and identifies available seats. We have supplied a theater management firm with several next-generation prototype sensors which have undergone extensive testing for this application. The theater management group has installed some of our sensors in working theater seats to complete the testing process. There are over 37,000 movie theater screens in the U.S. and several times that throughout the world. It is estimated that theater seats are replaced/refurbished about every seven years. Our system can be easily implemented to new theater construction and also retrofitted into existing movie theater complexes.

Emergency Vehicles

Intertek Industrial Corp., located in Jacksonville, Florida is a leading supplier of quality seatbelt systems and safety devices to the emergency vehicle market. Their Protek Passenger Awareness System uses our Bend Sensor® technology to enhance the safety of passengers and personnel in emergency vehicles. The system is installed in the seats of the rear compartments of the emergency vehicle and provides the driver with constant feedback as to the seated and secured status of passengers and personnel in the rear of the vehicle. The system is currently installed in about 20 ambulances and is being tested for use in other types of emergency vehicles. Throughout 2009 Intertek has issued additional purchase orders for their existing customers.

Flow Control Applications

Our flexible sensor has proven to be an extremely robust and durable flow control switch. The Bend Sensor® product allows for the measurement of liquid and air flow, and has been tested to over 35 million cycles without failure. When the Bend Sensor® device is placed in a flow stream, it can measure if flow is occurring, or it can measure the amount of flow that is occurring. The fact that our design incorporates a single layer flexible devise allows for it to operate in many harsh environments. While other technologies are affected by dirt, dust, and liquids, the Bend Sensor® product is able to operate under these conditions. We are currently working with a number of customers on various flow applications.

Other Applications

Management believes the potential market for our technology includes using the technology to replace or upgrade existing devices used in industrial control systems, medical equipment and instrumentation, computer peripherals, automotive transmission equipment, commercial vending equipment and other devices. We have developed, or are developing:

.

a vibration sensor;

.

a rupture disc/bursting disc utilizing the Bend Sensor® as the detection/alarm element of a rupture disc device;

.

an infant bed cover using our patented sensors that will be used to monitor infants in the prevention of sudden infant death syndrome (SIDS);

.

an interactive glove to assist doctors in neuroscience studies to determine a patient's level of motor skills, for rehabilitation, post surgical evaluation or for assisting the disabled;

.

Toys and video gaming devises; and

.

Sports applications:

The Company has developed several sports related products featuring the Company's patented Bend Sensor® technology. The products are currently being demonstrated to major equipment manufacturers and distributors and the Company anticipates they could be brought to market by the end of 2010.

The products currently include the use of sensor technology for bowling and golf shoes. The products will be used to help measure and improve an individual's performance. Several prototypes of the shoes have been completed and are currently in the process of being demonstrated to major equipment manufactures. Among other things the shoes will measure distribution of weight and weight transfer during the monitored event and present an image of the individual's performance.

We intend to further identify applications of our technology in numerous fields and industries. A core marketing strategy is to seek applications of our technology for products used by customers that emphasize functionality, reliability, quality, and user convenience.

BUSINESS STRATEGY

Management believes that our future success will depend upon our ability to coordinate our product design, manufacturing, distribution and service strategies in a long-term business model. One sales strategy is to offer a line of standard sensor products with corresponding hardware, electronics and software to facilitate ease of implementation of our technology into a customer's system. The standard product line is expected to be sold directly to the customer and through manufacturer's representatives and distributors. We have also expanded our product offering to include substantially complete value-added assemblies. We continue to consider licensing or partnership arrangements. We anticipate selling primarily to original equipment manufacturers for worldwide distribution. For the international customers, we plan to contract, sell and distribute our products through various manufacturer representatives and distributors.

Since our intended customers are typically technology companies, the design phase of the sales cycle is extremely important and considerably longer than other industries. The original equipment manufacturers typically approach us with a conceptual product and request that we assist in the initial engineering, design and production of a working prototype for which we generate limited revenues. The prototype is then tested in the environment in which the ultimate product will be placed. During this process, the customer is in constant contact with our application and electrical engineers. Customers also meet with internal sales and support individuals to discuss marketing and distribution strategies for the end consumer products.

We also have added value by expanding our sensor product lines to include circuit boards, enclosures, etc. and have moved toward a fully integrated product while validating and showing the versatility of our Bend Sensor® technology. We currently have several such fully developed products that will directly compete with existing products in the automotive industry. We believe our products provide greater reliability, more functionality and can be implemented at a lower overall cost to the customer. We are in the process of finalizing our marketing campaign that will include a technology based company that is interested in being our outside sales representative for our sensor technology. These fully integrated products will create a much larger value added profit margin for the Company. However, there is no assurance that such profit margins will be achieved or that these products will be produced in volumes to produce significant revenue in the near future.

MARKETING AND SALES

We intend to market our automotive products primarily to original equipment manufacturers (OEM s), either directly or through Tier 1 suppliers. Other products will be marketed directly to manufactures or distributors. Our primary marketing objectives are to generate demand for our products, enhance name recognition and support OEM s and manufactures. We believe that the successful use of our products by OEM s and Tier 1 suppliers will create additional demand for higher quantities of our existing products. We

also anticipate that the success of our existing products will allow us to successfully introduce new products and applications to the market.

We currently have a relationship with several Tier 1 suppliers in the automotive industry and believe that our relationship with OEM s and Tier 1 suppliers will be an important part of our overall sales strategy. We also have an agreement with a significant manufacturer of medical bed mattresses. In the early stage of this strategy, we will be dependent on a few OEM s and manufacturers and if we lose their business it will have a significant adverse effect on our results of operations until alternative distribution channels can be established. We may consider contractual commitments to OEM s and Tier 1 suppliers in exchange for fees and/or royalties. In addition, because we sell on a limited basis directly to end users, we are dependent, in part, on the OEM s for information about retail product sales and demand for sensor technology. Accordingly, any rapid cessation of purchases or a switch to other companies' products by end users may not be immediately evident to us, and could result in increased product returns.

We also intend to market our products through the use of our web site, and by developing a field sales force including direct marketing employees in strategic areas and manufacturer s representatives nationwide to generate OEM and Tier 1 supplier customers. As our market grows we anticipate expanding our distribution network throughout the world. There can be no assurance that we will be successful in developing such a sales force or in expanding our distribution network.

License and supply arrangements, such as those discussed above, create certain risks for us, including:

Reliance for sales of products on other parties and, therefore, reliance on the other parties' marketing ability, marketing plans and credit-worthiness;

If our products are marketed under other parties' labels, goodwill associated with use of the products may inure to the benefit of the other parties rather than Flexpoint Sensor Systems and its subsidiaries;

We may have only limited protection from changes in manufacturing costs and raw materials costs; and

If we are reliant on other parties for all or substantially all of our sales, we may be limited in our ability to negotiate with such other parties upon any renewals of their agreements.

MANUFACTURING AND DISTRIBUTION

Automobile manufacturers, Tier 1 suppliers and many international companies require all manufactured parts be manufactured in ISO/TS-16949 certified facilities. IS0/TS-16949 is a Quality Management System that contains the particular requirements for the application of ISO 9001:2000 for automotive production and relevant service part organization. TS-16949 is based on ISO requirements 9001:2000, but it contains additional requirements that are particular to the automotive industry. These additions are considered automotive interpretations by the ISO community of accreditation bodies and registrars. TS-16949 is a common supplier quality standard for Chrysler LLC Corporation, Ford Motor Company and General Motors Corporation. TS-16949 applies to suppliers of production materials, production and service parts, heat treating, painting and plating and other finishing services. It does not, therefore, apply to all suppliers of the major automotive companies.

TS-16949 certification is necessary to assure potential customers that we have the ability and resources to meet the quantities demanded in a purchase agreement and that we are able to uphold the quality standards required for consideration as an automotive supplier. We have started the process of qualifying our own manufacturing facility for TS-16949, but we determined that it was not necessary that we had the required manufacturing capabilities now. Therefore to meet the requirement in 2005 we entered into a Cooperative Agreement with The Bergquist Company, a Minnesota corporation that is a qualified automotive manufacturer. The agreement provides that the companies will cooperate with one another to produce Bend Sensor® technology applications for the automotive industry. This cooperative agreement provides us with the means to deliver a finished product to market. Since 2005 we have identified several other manufacturers who have the required certifications and who have expressed interest in entering into similar agreements should we be unable to certify our existing facility in time to meet the requirements of future automotive manufacturing agreements.

SOURCE OF RAW MATERIALS

The Bend Sensor® product consists of a coated substrate, such as plastic, that changes in electrical conductivity as it is bent. Electronic systems connect to the sensor and measure with fine detail the amount of bending or movement that occurs. The single layer design of the Bend Sensor® eliminates many of the problems associated with conventional sensors such as dust, dirt, liquids, and heat and pressure affects. Depending on the application an over-laminates or over-molding may also be applied to the sensors for added environmental protection. Due to its unique construction and the ability to use multiple types of substrates all raw materials needed to produce the Bend Sensor® are readily available and therefore, the Company is not reliant on a single supplier.

COMPETITION

The sensor business is highly competitive and competition is expected to continue to increase. We will compete directly with firms that have longer operating histories, more experience, substantially greater financial resources, greater size, more substantial research and development and marketing organizations, established distribution channels and are better situated in the market. We do not have an established long term customer base and are likely to encounter a high degree of competition in developing a larger customer base.

To management's knowledge, technology similar to our technology is currently in production by other competitors. Management believes that our products will be sufficiently distinguishable from the existing products so that it will not compete directly with existing sensor products. Certain force transducer sensors and fiber optic sensors are comparable to our Bend Sensor® technology; however, management believes that the force transducer sensor is not as reliable as our Bend Sensor® technology and that the fiber optic sensors are not as cost effective as our Bend Sensor® technology. As this new area grows, additional manufacturers may attempt to introduce similar products and competition could intensify.

In the medical electronics field, our competitors are the numerous potentiometer manufacturers. In the auto seat field our competitors are the numerous capacitive, piezo, infrared, fsr and ultrasonic sensor manufacturers. Such competitors may use their economic strength and relationships to influence the market to continue to buy their existing products. One or more of these competitors could use their resources to improve their current products or develop new products that may compete more effectively with our products. New competitors may emerge and may develop products and capabilities which compete directly with our products. No assurance can be given that we will be successful in competing in this industry.

We intend to compete by offering products that have enhanced features, ease of use, functionality, compatibility, reliability, comparable price, quality and support. Management also believes our intellectual property provides an advantage over our competitors. Although management believes that our products will be well received in our markets because of innovative features, performance characteristics and cost-effective pricing, there can be no assurance that comparable or superior products incorporating more advanced technology or other features or having better price or performance characteristics will not be introduced by competitors with greater resources than ours.

PATENTS AND INTELLECTUAL PROPERTY

We regard certain of our designs as proprietary and attempt to protect them with patents and by restricting disclosure of the designs as trade secrets. We have nine issued patents for our Bend Sensor® technology and have filed three additional patent applications, and are in the process of preparing one additional patent for new types of sensors using our technology. Sensitron owns eight United States patents and one foreign patent related to the Bend Sensor® technology. Patents do expire and it will be necessary for us to file patents in the United States and in various foreign countries for each application we develop so that it is protected from competition. The earliest patent will expire in

December 2013; however, we have improved these technologies and expect to file new patents based on the enhancements. We must file patents on any technology for which we develop enhancements which contain material improvements to the original technology. We are aware of three potentially conflicting patents which we believe will not affect our current or planned use of our technology.

There can be no assurance that the protection provided by patents and patent applications, if issued, will be broad enough to prevent competitors from introducing similar products or that such patents, if challenged, will be upheld by the courts of any jurisdiction. Patent infringement litigation, either to enforce our patents or defend us from infringement suits, are expensive and could divert resources from other planned uses.

Patent applications filed in foreign countries and patents in those countries are subject to laws and procedures that differ from those in the United States. Patent protection in foreign countries may be different from patent protection under United States laws and may not be as favorable to us. We also attempt to protect our proprietary information through the use of confidentiality agreements and by limiting access to our facilities. There can be no assurance that our program of patents, confidentiality agreements and restricted access to our facilities will be sufficient to protect our proprietary technology.

Management believes that because of the rapid pace of technological change in our markets, legal protection of our proprietary information is less significant to our competitive position than factors such as continuing product innovation in response to evolving industry standards, technical and cost-effective manufacturing expertise, effective product marketing strategies and customer service. Without legal protection; however, it may be possible for third parties to commercially exploit the proprietary aspects of our products.

MAJOR CUSTOMERS

Because currently the Company has a limited customer base and historically revenues have not been sufficient to support our current operations therefore, the company does not have one customer that represents 10% or more of our total revenue and we do not have any backlog of production of our Bend Sensor® products. Because our technology uses raw materials that are readily available throughout the world we have never had an environmental complaint or issue.

RESEARCH AND DEVELOPMENT

Although we hold the patent to the basic Bend Sensor® technology, as well as other applications, there will be other competitors working to develop competing technologies. To stay on the forefront of the technology, and to serve the needs of the customer, we will need to aggressively pursue improvements to existing systems and develop new systems as well. For the year ended December 31, 2009 we spent $446,294 in research and development, primarily enhancing specific applications for the automotive, medical and industrial industries with our Bend Sensor® technology, and testing Bend Sensor® applications for and in new products. Compared to $500,086 spent on research and development for the year ended December 31, 2008 related to development engineering for the medical bed technology, new product development resulting in new patents and testing of products for marketable applications.

Also, we believe that our coatings for the Bend Sensor® product are difficult to duplicate. We must develop new coatings to fit emerging customer needs and to stay ahead of the competition. There can be no assurance that we will be successful in developing new coatings. While we expect that future research and development efforts, if any, will lead to the filing of additional patent applications, there can be no assurance that any additional patent filings will be forthcoming.

EMPLOYEES

As of the date of this filing we have 5 full time employees and employ 2 sub-contractors. Our employees are not presently covered by any collective bargaining agreement. We have not experienced any work stoppages and believe that our relations with our employees are good.

ITEM 1A. RISK FACTORS

Factors Affecting Future Performance

We have a history of losses and may never become profitable.

We are currently unable to fund our day-to-day operations from revenues and the lack of revenues has impeded our continued growth and has caused delays in our business development. We have generated operating capital from our private placements completed in March 2005 and June and September 2007 that have funded our operations for the past four years. For the 2009 twelve month period we had negative cash flows from operating activities of $797,311 and we don t expect that total revenues in 2010 will be sufficient to support our operations. In addition, with the economic downturn in the automotive industry we will need to further expand our business activities outside the automotive market over the next eight to twelve months; therefore, anticipate needing to raise an additional $1.0 to $1.5 million in funding. We may be required to rely on debt financing, further loans from related parties, and private placements of our common stock for our additional cash needs. Such funding sources may not be available or the terms of such funding sources may not be acceptable to the company. If the Company is unable to find such funding it could have a material adverse effect on our ability to continue as a going concern

We may not have adequate experience to successfully manage anticipated growth.

Since emerging from bankruptcy we restructured our management team and brought in an experienced group of executive level management personnel to direct the growth of our business operations. However, we may not be equipped to successfully manage any possible future periods of rapid growth or expansion, which could be expected to place a significant strain on our managerial, operating, financial and other resources. Our future performance will depend, in part, on our ability to manage growth effectively, which will require us to:

improve existing, and implement new, financial controls and systems, management information systems, operating, administrative, financial and accounting systems and controls,

maintain close coordination between engineering, programming, accounting, finance, marketing, sales and operations, and

attract and retain additional qualified technical and marketing personnel.

There is intense competition for management, technical and marketing personnel in our business. The loss of the services of any of our key employees or our failure to attract and retain additional key employees could have a material adverse effect on our ability to continue as a going concern.

<u>We may not have adequate manufacturing capacity to meet anticipated manufacturing contracts.</u>

Based on projected business development, we will need to complete a second production line and have it installed and approved during 2011. The second manufacturing line is expected as a result of anticipated increased manufacturing demand and improved manufacturing efficiencies. We have completed installation of our first production line and anticipate qualifying our manufacturing facility for ISO/TS-16949 certification as the Company successfully obtains additional manufacturing contracts during 2010 and 2011. However, we cannot assure you that we will satisfy ISO/TS-16949 qualification or that the production lines will produce product in the volumes required or that the production lines will satisfy the requirements of our automotive customers.

<u>Our success is dependent on our intellectual property rights which are difficult to protect.</u>

Our future success depends on our ability to protect our intellectual property. We use a combination of patents and other intellectual property arrangements to protect our intellectual property. There can be no assurance that the protection provided by our patents will be broad enough to prevent competitors from introducing similar products or that our patents, if challenged, will be upheld by courts of any jurisdiction. Patent infringement litigation, either to enforce our patents or defend ourselves from infringement suits, will be expensive and could divert our limited resources from other planned uses. Patent applications filed in foreign countries and patents in these countries are subject to laws and procedures that differ from those in the U.S. and may not be as favorable to us. We also attempt to protect our confidential information through the use of confidentiality agreements and by limiting access to our facilities. There can be no assurance that our program of patents, confidentiality agreements and restricted access to our facilities will be sufficient to protect our confidential information from competitors.

<u>Research and development may result in problems which may become insurmountable to full implementation of production.</u>

Customers request that we create prototypes and perform pre-production engineering, research and development. As a result, we are exposed to the risk that we may find problems in our designs that are insurmountable to fulfill production. In that event, we will be unable to recover the costs of the pre-production engineering, research and development. However, we are currently unaware of any insurmountable problems with ongoing engineering, research and development that may prevent further development of an application and products.

<u>Economic uncertainties will delay or eliminate new technological investments</u>

Due to the current downturn in the global economy and financial uncertainties, automakers and other potential customers could delay, significantly curtail or altogether eliminate any further investment in new technology including, the Bend Sensor® technology, until the global financial markets and economies stabilize. Due to our limited cash resources any delays in bringing our products and technology to market could have a material adverse effect on our ability to continue as a going concern

Because we are significantly smaller than the majority of our competitors, we may lack the financial resources needed to capture increased market share.

The market for sensor devices is extremely competitive, and we expect that competition will intensify in the future. There can be no assurance that we will be able to compete successfully against current or future competitors or that competitive pressures we face will not materially adversely affect our business, operating results or financial condition. We believe that none of our competitors have a product that is superior to our Bend Sensor® technology at this time. However, many of our competitors and potential competitors have substantially greater financial, technical and marketing resources, larger customer bases, longer operating histories, greater name recognition and more established relationships than we do. These competitors may be able to undertake more extensive marketing campaigns, adopt more aggressive pricing policies and devote substantially more resources to developing new products and markets than we can.

Ongoing industry consolidation among worldwide automotive parts suppliers and financial difficulties of U.S. auto makers may limit the market potential for our products.

In the automotive parts industry, there has been a trend of consolidation through business combinations and acquisitions of complementary technologies among worldwide suppliers as these suppliers seek to build stronger customer relationships with automobile manufacturers. Automobile manufacturers look to Tier 1 suppliers (major suppliers) to provide fully engineered systems and pre-assembled combinations of components rather than individual components. This trend of consolidation of suppliers may result in fewer Tier 1 suppliers and thus limit the marketing opportunities for our Bend Sensor® technology. In addition, in recent months large U.S. auto makers have announced plans to close plants and reduce their work force, some Tier 1 suppliers are in bankruptcy or in financial difficulty, and two automobile manufacturers have reported increased financial difficulties. These industry trends may limit the market for our products in these industries.

<u>Failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could lead to loss of investor confidence in our reported financial information</u>.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish a report by our management on our internal control over financial reporting. If we cannot provide reliable financial reports or prevent fraud, then our business and operating results could be harmed, investors could lose confidence in our reported financial information, and the trading price of our stock could drop significantly. In our annual report for the year ended December 31, 2010 we will be required to provide an attestation from our independent registered public accounting firm as to the effectiveness of our internal control over financial reporting. We cannot assure you as to our independent auditors conclusions at December 31, 2010 with respect to the effectiveness of our internal control over financial reporting. There is a risk that our independent auditors will not be able to conclude at any time that our internal controls over financial reporting are effective as required by Section 404 of the Act.

ITEM 2. PROPERTIES

We lease approximately 11,639 square feet of office and manufacturing space from F.G.B.P., L.L.C. The original lease term was for five years, commencing on October 1, 2004 and terminating on September 30, 2009. In April 2009, the Company amended the operating lease agreement for its manufacturing facility in Draper, Utah. Under the new terms of our operating lease the average monthly payments are $7,950, including common area maintenance through December 31, 2010. This amount increases to $8,450 during the final year of the lease ending December 31, 2011. This facility has executive offices and space for research and development and manufacturing. The building is located in a business park in Draper, Utah consisting primarily of high tech manufacturing firms and it is located adjacent to Utah s main interstate highway.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings as of the date of this filing.

ITEM 4. [Reserved]

PART II

ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASE OF EQUITY SECURITIES

MARKET INFORMATION

Our common stock is listed on the Financial Industry Regulatory Authority (FINRA) OTC Bulletin Board under the symbol FLXT. The following table lists the range for the high and low bid prices of our common stock for each quarter for the years ended December 31, 2009 and 2008, respectively, as reported by the OTC Bulletin Board. Over-the-counter market bid quotations reflect inter-dealer prices, without retail mark-up, mark-downs or commissions, and may not necessarily represent actual transactions.

	2009		2008	
Fiscal Quarter Ended	High	Low	High	Low
March 31				
June 30				
September 30				

December 31
$0.51
0.38
0.29
0.34
$ 0.27
0.16
0.09
0.12
$ 1.10
0.90
0.85
0.45
$ 0.75
0.70
0.41
0.22

Our shares are subject to Section 15(g) and Rule 15g-9 of the Securities and Exchange Act, commonly referred to as the penny stock rule. The rule defines penny stock to be any equity security that has a market price less than $5.00 per share, subject to certain exceptions. These rules may restrict the ability of broker-dealers to trade or maintain a market in our common stock and may affect the ability of shareholders to sell their shares. Broker-dealers who sell penny stocks to persons other than established customers and accredited investors must make a special suitability determination for the purchase of the security. Accredited investors, in general, include individuals with assets in excess of $1,000,000 or annual income exceeding $200,000 or $300,000 together with their spouse,

and certain institutional investors. The rules require the broker-dealer to receive the purchaser s written consent to the transaction prior to the purchase and require the broker-dealer to deliver a risk disclosure document relating to the penny stock prior to the first transaction. A broker-dealer also must disclose the commissions payable to both the broker-dealer and the registered representative, and current quotations for the security. Finally, monthly statements must be sent to customers disclosing recent price information for the penny stocks.

HOLDERS

As of April 6, 2010, we had 463 stockholders of record of our common stock, which does not include street accounts of securities brokers.

DIVIDENDS

We have not paid cash or stock dividends and have no present plan to pay any dividends. We intend to retain any earnings to finance the operation and expansion of our business and the payment of any cash dividends on our common stock is unlikely. However, our board of directors may revisit this matter from time to time and may determine our earnings, financial condition, capital requirements and other factors allow the payment of dividends.

RECENT SALES OF UNREGISTERED SECURITIES

On November 5, 2009, in lieu of paying cash for our Directors and Officers Insurance the Company issued 120,000 restricted shares to the owner of Universal Business Insurance and canceled the Company's debt of $22,200. We relied on an exemption from the registration requirements provided by Section 4(2) of the Securities Act.

On December 1, 2009 the Company issued 743,000 restricted shares, in lieu of cash, to the Chesapeake Group for Investor Relations services performed during 2009 and canceled $150,000 of the Company's debt. We relied on an exemption from the registration requirements provided by Section 4(2) of the Securities Act.

On December 9, 2009 the Company issued 550,000 restricted shares, in lieu of cash, to the Chesapeake Group for Investor Relations services performed during 2009 and canceled $110,000 of the Company's debt. We relied on an exemption from the registration requirements provided by Section 4(2) of the Securities Act.

On December 15, 2009 the Company issued 375,000 restricted shares, in lieu of cash, to Kevin Howard Esq. for legal services performed during 2007 and 2008 and canceled $75,000 of the Company's debt. We relied on an exemption from the registration requirements provided by Section 4(2) of the Securities Act.

ISSUER PURCHASE OF SECURITIES

None.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable to smaller reporting companies.

ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

EXECUTIVE OVERVIEW

Flexpoint Sensor Systems, Inc. is a development stage company engaged principally in improving its unique sensor technology, expanding its suite of products, developing new sensor applications, obtaining financing and seeking long-term sustainable manufacturing contracts. Our operations have not commenced to a commercial level and include designing, engineering, manufacturing and selling sensor technology and products featuring our Bend Sensor® technology and equipment.

We emerged from Chapter 11 bankruptcy on February 24, 2004 and since that time we have leased a manufacturing facility, purchased necessary equipment to establish a production line, negotiated contracts, manufactured and improved our patented Bend Sensor® technology devices and conducted testing on those devices. Our goal is to qualify our production line and facility as an ISO/TS 16949 production line and facility as it is required for manufacturing automotive and related parts. This qualification will increase the marketability of our products to automotive Tier 1 and parts suppliers.

During the past year we have matured from a research and development only company into a manufacturing and production company and continue to expand our product line. During 2007 and through 2009 we improved and enhanced the design of products for several Tier 1 automotive and other customers. We have completed advanced testing and have signed various agreements to provide products to the medical and automotive industries. We have developed a fully integrated safety system that provides added safety to emergency vehicle personnel and that has won awards over the past two years at the 2008 and 2009 EMS show and continues to gain acceptance in the industry as evidenced by the additional orders received during 2009. We are expanding the opportunities for our sensors to be used in the medical field and are developing an infant bed cover using our patented sensors that will be used to monitor infants in the prevention of sudden infant death syndrome (SIDS). The University of Rome used our sensors to develop an interactive glove to assist them in their neuroscience studies and understanding. They concluded that such a device using the Bend Sensor Technology could be used to determine a patient s level of motor skills, for rehabilitation, post surgical evaluation or for assisting the disabled. The University s conclusion was that data glove, and similar devices would have multiple applications in many fields including medical, work, sports and entertainment the full article published in the Journal of Neuroscience Methods *Improving Performance of Data Glove on Bend Sensors*," by Giovanni Saggio Ph.D.

Due to the Bend Sensor s single layer construction, overall durability, and its chemical resistant properties, we are working with a European supplier of a fuel management system that will use or sensing device as part of their system to produce significant fuel savings for fleets of large trucks. We are also working with a company to assist in the development of a home monitoring device that will be used to monitor the presence of individuals in certain locations of a home. With the aging population and increased life expectancy, many older individuals wish to continue living in their own homes. This system would allow aging individuals to continue to live independently while still providing security and peace of mind to their children and caregivers.

We continue to develop new products that we may sell or license in a variety of industries including to an industrial control company. We are also continuing to work closely with our partners on the further development of our medical bed and are looking forward to expanding this concept into the commercial market. And we continue to market and expand our network of Tier 1 automotive customers and product offerings. With the economic down turn in the global economy and the political uncertainty in the U.S. medical market we are focusing on smaller contracts with smaller production orders that can generate immediate reoccurring income for the Company. This new focus will assist in developing additional fully integrated products using our Bend Sensor® Technology, and will show the diversity and adaptability of the technology in unrelated industries.

Finalizing long-term, revenue generating, production contracts with other customers remains our greatest challenge because our on-going business is dependent on the types of revenues and cash flows generated by such contracts. Cash flow and cash requirement risks are closely tied to and are dependent upon our ability to attract significant long-term production contracts. We must continue to obtain funding to operate and expand our operations so that we can deliver our unique Bend Sensor® and Bend Sensor® related technologies and products to the market. Management believes that even though we are making positive strides forward with our business plan we will still need to raise additional operating capital. Accordingly, we cannot guarantee that we will realize significant revenues or that we will become profitable during 2010.

The widespread credit crisis has reduced consumer purchasing power and resulted in an overall down turn in consumer confidence. These factors have contributed to lower consumer spending and investments by companies in new technology and development that has contributed to the economic crisis we have experienced. While all sectors of the economy are experiencing difficult times, the automotive industry is particularly challenged. Worldwide automakers are faced with the challenge of providing a safer, more energy efficient, longer lasting product that consumers can afford. This will require new and innovative ways to lower the overall weight of the vehicle to improve its fuel efficiencies, while lowering the cost. Because historically product and design changes in the automotive industry are slow, averaging two to three years before actually being incorporated into a commercially viable automotive platform. With its versatility, light weight single layer construction and the fact that it is currently being used in various safety devices we believe the Bend Sensor® is positioned well to meet the challenges that the automobile industry is facing.

LIQUIDITY AND CAPITAL RESOURCES

Our revenue is primarily from design contract, testing and limited production services for prototypes and samples, and is not to a level to support our operations. Management anticipates that we may not realize significant revenue within the next six to eight months. For the past twelve months we have relied on the proceeds of loans from insiders and the private placements we completed in March 2005 and June and September 2007 to satisfy our cash requirements. In the 2005 private placement we issued an aggregate of 2,836,335 units to purchasers and 140,000 units were issued to the placement agent. Each unit consisted of one share and one warrant to purchase one share at an exercise price of $3.00. We realized net proceeds of $3,907,207 from this private placement. In the 2007 private placements we issued an aggregate of 1,500,000 shares of common stock at a price of $1.00 per share. Net proceeds of $1,500,000 were realized from the private placements. In November 2008 we secured $300,000 of short-term financing from related parties. The notes were originally due on May 31, 2009 with an annual interest rate of 10% and secured by the Company's business assets, they also carry a conversion option for restricted common shares at $.25 per share. In May these notes were extended. During 2009 the same related parties have provided additional funding of $643,564 under similar terms (see item 13 below).

In November and December 2009 the Company issued 1,788,000 in restricted common shares in lieu of cash and canceled $357,200 in Company debt. The shares were issued to satisfy the Company's obligations for investor relations and legal services from 2007 through 2008, and for the Company's 2009 directors and officers insurance.

During 2009 management initiated additional cost cutting measures and believes that our current cash burn rate is approximately $50,000 per month and that the remaining proceeds from additional notes to related parties and accounts receivable will fund our operations for at least the next several months. Our auditors have expressed doubt about our ability to continue as going concern and that we may not realize significant revenue or become profitable within the next twelve months. We will require additional financing to fund our short and long-term cash needs. We may rely on debt financing, additional loans from related parties and private placements of common stock for additional funding. However, we cannot assure you that we will be able to obtain financing, or that sources of financing, if any, will continue to be available, and if available, that they will be on terms favorable to us.

We expect that we may have to issue common stock to pay for services and agreements rather than use our limited cash. Any issuance of common stock will likely be pursuant to exemptions provided by federal and state securities laws. The purchasers and manner of issuance will be determined according to our financial needs and the available exemptions. We also note that if we issue more shares of our common stock our shareholders may experience dilution in the value per share of their common stock.

As we enter into new technology agreements in the future, we must ensure that those agreements provide adequate funding for any pre-production research and development and manufacturing costs. If we are successful in establishing agreements with adequate initial funding, management believes that our operations for the long term will be funded by revenues, licensing fees and royalties related to these agreements. However, we have formalized only a few additional agreements during the past year and there can be no assurance that the agreements will generate sufficient revenues or be profitable in the future or that a desired technological application can be successfully brought to market.

COMMITMENTS AND CONTINGENCIES

Our principal commitments at December 31, 2009 consist of our operating lease and total current liabilities of $499,298 which includes short-term notes payable of $329,264, and long-term notes payable of $421,459 net of the discounts of the intrinsic value of the conversion feature associated with the notes. Our operating lease has average monthly payments of $7,950, including common area maintenance through December 31, 2010 and increases to $8,450 through the final year of the lease ending December 31, 2011. The total future minimum payments under this lease as of December 31, 2009 were $196,800.

Our total current liabilities include accounts payable of $81,313 related to normal operating expenses, including health insurance, utilities, production supplies and travel expense. Accrued liabilities at December 31, 2009, were $88,721 and were related to payroll tax liabilities, accrued legal, audit and tax expenses, investor relations consulting, and accrued Paid Time Off, a combination vacation-sick leave policy.

OFF-BALANCE SHEET ARRANGEMENTS

None.

CRITICAL ACCOUNTING 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 amounts reported in the consolidated financial statements and accompanying notes. Estimates of particular significance in our financial statements include goodwill and the annual tests for impairment of goodwill and valuing stock option compensation.

We annually test long-lived assets for impairment or when a triggering event occurs. Impairment is indicated if undiscounted cash flows are less than the carrying value of the assets. The amount of impairment is measured using a discounted-cash-flows model considering future revenues, operating costs and risk-adjusted discount rate and other factors. The long-lived asset impairment test conducted at December 31, 2008 identified a loss of $246,764 this additional expense was recognized accordingly. The analysis compared the present value of projected net cash flows for the remaining current year and next two years against the carrying value of the long-lived assets. The result of the valuation analysis showed an impairment of long-lived assets, as their carrying values exceeded the present value of the discounted projected revenues. Under similar analysis no impairment charge was taken during the twelve months ended December 31, 2009. Impairment tests will be conducted on a regular basis and, should they indicate a carrying value in excess of fair value, additional charges may be required.

We account for stock options under Statement of Financial Accounting Standards, Accounting Standards Codification Topic 718, Stock Compensation (formerly FASB Statement No. 123(R)), the pronouncement requires that recognition of the cost of employee services received in exchange for stock options and awards of equity instruments be based on the grant-date fair value of such options and awards and is recognized as an expense in operations over the period they vest. The fair value of the options we have granted is estimated at the date of grant using the Black-Scholes American option-pricing model. Option pricing models require the input of highly sensitive assumptions, including expected stock volatility. Also, our stock options have characteristics significantly different from those of traded options, and changes in the subjective input assumptions can materially affect the fair value estimate. Management believes the best input assumptions available were used to value the options and that the resulting option values are reasonable. For the years ended December 31, 2009 and 2008 we recognized $122,467 and $237,299, respectively, of stock-based compensation expense for our stock options and there was approximately $30,568 of unrecognized compensation cost related to employee stock options that will be recognized over approximately 1.56 years.

RESULTS OF OPERATIONS

The following discussions are based on the consolidated operations of Flexpoint Sensor Systems, Inc. and its subsidiaries, Sensitron, and Flexpoint International, LLC and should be read in conjunction with our audited financial statements for the years ended December 31, 2009 and 2008. These financial statements are included in this report at Part II, Item 8, below.

SUMMARY OF OPERATING RESULTS

For the year ended

For the year ended

December 31, 2009

December 31, 2008

Engineering, contract and testing revenue

	$ 62,465	$ 175,858
Total operating costs and expenses	(1,555,615)	(2,173,225)
Net other income (expense)	(197,571)	(3,595)
Net loss	(1,690,721)	(2,000,962)
Basic and diluted loss per common share	(0.07)	(0.08)

Our revenue for the 2009 and 2008 years was primarily from design and development engineering, prototype products and sample products. Revenue from research and development engineering and prototype product contracts is recognized as the services are provided and accepted by the customer. Revenue from contracts to license technology to others is deferred until all conditions under the contract are met and then the sale is recognized as licensing royalty revenue over the remaining term of the contract. Revenue from the sale of a product is recorded at the time of shipment to the customer. Management anticipates that revenue will increase as we fulfill our obligations under the R&D manufacturing agreement and finalize additional production contracts.

Total operating costs and expenses decreased for 2009 when compared to 2008 by $617,610. Included in 2008 operating costs and expenses were charges of $246,764 taken for the impairment of long-lived assets. Administrative and marketing expenses decreased to $970,485 for 2009 compared to $1,275,820 for 2008 primarily due to reductions in compensation expense recognized according to FASB ASC Topic 718 for share-based option compensation, reduction in employee related expenses and the reduction in rent. Research and development expense also decreased by $53,792 for 2009 when compared 2008, while cost of revenue and amortization of patents and proprietary technology expense remained relatively the same.

Total net other expense in 2009 includes a $190,096 non-cash interest expense associated with the beneficial conversion feature of the notes payable to related parties, and interest earned on excess cash on deposit. In November 2009 the Company recognized a loss of $7,800 on a stock debt exchange, due to a difference in intrinsic value of the actual stock exchanged compared to the stated conversion feature of the debt instrument. The increase in interest expense during 2009 was due to the additional notes payable from related parties that was used for operations.

As we continued to mature as a manufacturing company our engineering design and production revenues increased as a percent of our total revenue during 2009. While it is expected the additional investment made in 2010 for product and system development will result in further generation of production related revenues, there is no guarantee that operating losses will reduce in the short term.

The chart below presents a summary of our consolidated balance sheets at December 31, 2009 and 2008.

SUMMARY OF BALANCE SHEET INFORMATION

	Year ended December 31, 2009	Year ended December 31, 2008
Cash and cash equivalents	$ 12,680	$ 178,158
Total current assets	45,278	251,442
Total assets	6,652,015	

7,103,754

Total current liabilities

499,298

443,268

Total liabilities

920,757

443,268

Deficit accumulated during the development stage

(14,943,734)

(13,253,013)

Total stockholders' equity

5,731,258

6,660,486

Cash and cash equivalents decreased in 2009 compared to 2008. The decrease is the net result of cash used to fund operations. Until our revenue increases, our cash and assets will decrease as we fund our operations. We will need to raise additional operating capital during the first half of 2010. It is expected that this will be accomplished by issuing stock, securing additional loans from related parties, or through the licensing of our technology. We anticipate needing to raise an additional $1.0 to $1.5 million in funding.

Our non-current assets decreased at December 31, 2009 compared to 2008 due to the depreciation and amortization associated with our long-lived assets. These assets include, after adjustments, property and equipment valued at $441,579, patents and proprietary technology of $802,244, goodwill of $5,356,414, and deposits of $6,500 for the leased facility.

Total current liabilities increased by $56,030 at December 31, 2009, as a result of additional short-term notes payable to related parties. Accrued liabilities decreased at December 31, 2009 by $70,475 when compared to December 31, 2008. The decrease is primarily due to the issuance of restricted stock to pay for services related to legal and investor relations expenses. Total liabilities increased due to the renegotiation of related party notes, which extended the maturity dates of the debt..

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

INDEX TO FINANCIAL STATEMENTS

Page

Registered with the Public Company

Accounting Oversight Board

HANSEN, BARNETT & MAXWELL, P.C.

A Professional Corporation

CERTIFIED PUBLIC ACCOUNTANTS

5 Triad Center, Suite 750

Salt Lake City, UT 84180-1128

Phone: (801) 532-2200

Fax: (801) 532-7944

www.hbmcpas.com

To the Stockholders and the Board of Directors

Flexpoint Sensor Systems, Inc.

We have audited the accompanying consolidated balance sheets of Flexpoint Sensor Systems, Inc. and subsidiaries (a development stage company) (the Company) as of December 31, 2009 and 2008 and the related consolidated statements of operations, stockholders equity, and cash flows for the years then ended and for the cumulative period from February 24, 2004 (date of emergence from bankruptcy) through December 31, 2009. 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 audits 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Flexpoint Sensor Systems, Inc. and subsidiaries as of December 31, 2009 and 2008 and the results of their operations and their cash flows for the years then ended and for the cumulative period from February 24, 2004 (date of emergence from bankruptcy) through December 31, 2009 in conformity with U.S. generally accepted accounting principles.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company is in the development stage, has not earned any appreciable revenue, has suffered net losses and has had negative cash flows from operating activities during the years ended December 31, 2009 and 2008 and for the cumulative period from February 24, 2004 (date of emergence from bankruptcy) through December 31, 2009. These matters 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 1. The financial statements do not include any adjustments relating to the recoverability and classification of asset carrying amounts or the amount and classification of liabilities that might result should the Company be unable to continue as a going concern.

/s/ Hansen, Barnett & Maxwell, P.C.

HANSEN, BARNETT & MAXWELL, P.C.

Salt Lake City, Utah

April 6, 2010

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2009	**2008**
ASSETS		
Current Assets		
Cash and cash equivalents	$ 12,680	$ 178,158
Accounts receivable		

11,451

32,551

Inventory

9,265

10,016

Deposits and prepaid expenses

11,882

30,717

Total Current Assets

45,278

251,442

Long-Term Deposits

6,500

6,500

Property and Equipment, net of accumulated depreciation

of $151,111 and $29,984	441,579	560,161
Patents and Proprietary Technology, net of accumulated amortization of $158,741 and $31,748	802,244	929,237
Goodwill	5,356,414	5,356,414
Total Assets	$ 6,652,015	$ 7,103,754

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities

Accounts payable	$ 81,313	$ 34,072
Accrued liabilities	88,721	159,196
Convertible notes payable to related party, net of discount of		

$8,750 and
$50,000

329,264

250,000

Total Current Liabilities

499,298

443,268

Long-Term Liabilities

Long-Term Convertible notes payable to related party, net of discount of $174,905 and $0

421,459

-

Total Liabilities

920,757

443,268

Stockholders' Equity

Preferred stock $0.001 par value; 1,000,000 shares authorized;

no shares issued or outstanding

-

		-
Common stock $0.001 par value; 100,000,000 shares authorized; 26,580,887 shares and 24,792,887 shares issued and outstanding	26,580	24,792
Additional paid-in capital	18,882,279	17,851,493
Warrants and options outstanding	1,766,133	2,037,214
Deficit accumulated during the development stage	(14,943,734)	(13,253,013)
Total Stockholders' Equity	5,731,258	

6,660,486

Total Liabilities and Stockholders' Equity

$

6,652,015

$

7,103,754

The accompanying notes are an integral part of these consolidated financial statements

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

CONSOLIDATED STATEMENTS OF OPERATIONS

(Date of

Emergence from

Bankruptcy)

For the Years

through

Ended December 31,	
December 31,	
2009	
2008	
2009	
Engineering, Contract and Testing Revenue	
$	62,465
$	175,858
$	

729,627

Operating Costs and Expenses

Amortization of patents and proprietary technology

126,993

137,022

834,617

Cost of revenue

11,843

13,533

138,720

Administrative and marketing expense

970,485

1,275,820

10,178,701

Research and development expense

446,294

500,086

2,402,336

Impairment of long-lived assets

-

246,764

546,562

Total Operating Costs and Expenses

1,555,615

2,173,225

14,100,936

Other Income (Expense)

Interest expense

(190,096)

(13,286)

(1,779,436)

Interest income

325

9,691

131,725

Sublease rent income

-

-

11,340

Other income

-

-

478

Gain (loss) on stock debt exchange

(7,800)

-

63,468

Net Other Income (Expense)

(197,571)

(3,595)

(1,572,425)

Net Loss

$

(1,690,721)

$

(2,000,962)

$

(14,943,734)

Basic and Diluted Loss Per Common Share

$

(0.07)

$

(0.08)

Basic and Diluted Weighted-Average

Common Shares Outstanding

24,921,627

24,792,887

The accompanying notes are an integral part of these consolidated financial statements

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

For the Period from February 24, 2004 (Date of Emergence from Bankruptcy) through December 31, 2009

Deficit

Warrants

Accumulated

Additional

and

During the

Total

	Common Stock		Paid-in	Options	Development	Stockholders'
	Shares	Amount	Capital	Outstanding	Stage	Equity
Balance-February 24, 2004 (Date of Emergence from Bankruptcy)	14,098,202	$ 14,098	$ 4,952,166	$ -	$ -	$ 4,966,264

Beneficial debt conversion option	-	-	1,500,000	-	-	1,500,000
Conversion of note payable, March 31 and May 19, 2004, $.50 per share	3,000,000	3,000	1,497,000	-	-	1,500,000
Issuance for consulting services, March 3, 2004, $1.15 per share	100,000	100	114,580	-	-	114,680

Stock based compensation from 650,000 warrants issued on March 3, 2004 for consulting services

-

-

-

731,328

-

731,328

Issuance for acquisition of equipment and proprietary technology from Flexpoint Holdings, LLC,

a company controlled by a stockholder, March 31, 2004, $ 1.21 per share

1,600,000

1,600

1,929,709

-

-

1,931,309

Issuance for compensation, November 24, 2004, $1.48 per share

1,200,000

1,200

1,774,800

-

-

1,776,000

Net loss

-

-

-

-

(4,510,726)

(4,510,726)

Balance-December 31, 2004

19,998,202

19,998

11,768,255

731,328

(4,510,726)

8,008,855

Issuance of common stock at $ .77 per share and 2,836,335 warrants at $0.61 per warrant for cash,

net of $347,294 cash offering costs, 140,000 common shares and 140,000 warrants January through March 2005

2,976,335

2,976

1,977,294

1,926,937

-

3,907,207

Issuance of 30,000 warrants at $1.38 per warrant for services, July 2005

-

-

-

41,300

-

41,300

Issuance of common stock at $ 1.73 per share, as compensation to a director of the Company for services, August 2005

18,350

18

31,727

-

-

31,745

Net loss

-

-

-

-

(1,770,020)

(1,770,020)

Balance - December 31, 2005

22,992,887

22,992

13,777,276

2,699,565

(6,280,746)

10,219,087

Stock-based employee compensation from stock options

-

-

-

827,718

-

827,718

Exercise of warrants, $0.70 per share, for cash, June 2006

300,000

300

547,480

(337,780)

-

210,000

Net loss

-

-

-

-

(2,512,836)

(2,512,836)

Balance - December 31, 2006

23,292,887

23,292

14,324,756

3,189,503

(8,793,582)

8,743,969

Issuance of common stock at $ 1.00 per share - June 2007

1,000,000

1,000

999,000

-

-

1,000,000

Issuance of common stock at $ 1.00 per share - September 2007

500,000

500

499,500

-

-

500,000

Stock-based employee compensation from stock options

-

-

-

578,649

-

578,649

Expiration of warrants, July through September 2007

-

-

1,968,237

(1,968,237)

-

-

Net loss

-

-

-

-

(2,458,469)

(2,458,469)

Balance - December 31, 2007

24,792,887

24,792

17,791,493

1,799,915

(11,252,051)

8,364,149

Stock-based employee compensation from stock options

-

-

-

237,299

-

237,299

Stock-based conversion feature on notes payable

-

-

60,000

-

-

60,000

Net loss

-

-

-

(2,000,962)

(2,000,962)

Balance - December 31, 2008

24,792,887

24,792

17,851,493

2,037,214

(13,253,013)

6,660,486

Conversion of note payable, November 2009, $0.25 per share

120,000

120

29,880

-

-

30,000

Issuance for services, December 2009, $0.20 per share

1,668,000

1,668

333,332

-

-

335,000

Stock-based employee compensation from stock options

-

-

-

122,467

-

122,467

Stock-based conversion feature on notes payable

-

-

274,026

-

-

274,026

Expiration of warrants September 2009

-

-

393,548

(393,548)

-

-

Net loss

-

-

-

-

(1,690,721)

(1,690,721)

Balance December 31, 2009

26,580,887

$

26,580

$

18,882,279

$

1,766,133

$

(14,943,734)

$

5,731,258

The accompanying notes are an integral part of these consolidated financial statements

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Cumulative

Period from

February 24, 2004

(Date of Emergence

For the Years

from Bankruptcy)

Ended December 31,

through

2009

2008

December 31, 2009

Cash Flows from Operating Activities:

Net loss	$ (1,690,721)	$ (2,000,962)	$ (14,943,734)

Adjustments to reconcile net loss to net cash used in operating activities

Depreciation	121,127	137,825	794,441
Amortization of patents and proprietary technology	126,993	137,022	834,617
Impairment of long-lived assets	-	246,764	546,562
Issuance of common stock and warrants for services	335,000	-	

3,030,053

Expenses paid by increase in convertible note payable

22,200

-

82,200

Amortization of discount on note payable

140,371

10,000

1,707,037

Stock-based compensation expense for employees

122,467

237,299

1,766,133

Loss on conversion of notes payable to common stock

7,800

-

7,800

Changes in operating assets and liabilities:

Accounts receivable

21,100

(25,618)

(11,451)

Inventory

751

(10,016)

(9,265)

Deposits and prepaid expenses

18,835

(3,493)

(18,382)

Accounts payable

47,241

18,485

(126,793)

Accrued liabilities

(70,475)

124,959

86,229

Deferred revenue

-

(50,000)

(343,750)

Net Cash Used in Operating Activities

(797,311)

(1,177,735)

(6,598,303)

Cash Flows from Investing Activities:

Payments for the purchase of equipment	(2,545)	-	(200,119)
Payments for patents	-	(2,242)	(45,868)
Payment for acquisition of equipment and proprietary technology from Flexpoint Holdings, LLC	-	-	(265,000)
Net Cash Used in Investing Activities	(2,545)	(2,242)	

(510,987)

Cash Flows from Financing Activities:

Net proceeds from issuance of common stock and warrants

-

-

5,617,207

Principal payments on notes payable - related parties

(50,000)

-

(510,300)

Proceeds from notes payable - related parties

-

-

445,300

Proceeds from borrowings under convertible note payable

684,378

300,000

1,567,712

Net Cash Provided by Financing Activities

634,378

300,000

7,119,919

Net Change in Cash and Cash Equivalents

(165,478)

(879,977)

10,629

Cash and Cash Equivalents at Beginning of Period

178,158

1,058,135

2,051

Cash and Cash Equivalents at End of Period

$

12,680

$

178,158

$

12,680

Supplemental Cash Flow Information:

Cash paid for interest

$

-

$

107

$

16,955

Supplemental Disclosure on Noncash Investing and

Financing Activities

Outstanding notes payable converted to stock

$

22,200

$

-

$

1,522,200

Expiration of warrants outstanding

393,548

2,361,785

Recognition of discounts on convertible notes payable

291,503

60,000

1,851,503

Extinguishment of unamortized discounts on modified convertible notes payable

(17,477)

-

(17,477)

The accompanying notes are an integral part of these consolidated financial statements

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 NATURE OF BUSINESS

Nature of Operations Flexpoint Sensor Systems, Inc. (the Company) is located in Draper, Utah and is a development stage company. The Company s development stage activities to date have included acquiring equipment and technology, obtaining financing, limited production and seeking long-term manufacturing contracts. The Company s planned operations, which have not yet commenced at a commercial level, are in designing, engineering, manufacturing and selling sensor technology and equipment using flexible potentiometer technology. Through December 31, 2009, the Company had not begun manufacturing products and sensors at a commercially sustainable level.

Principles of Consolidation The accompanying consolidated financial statements include the accounts of Flexpoint Sensor Systems, Inc. and its wholly owned subsidiaries, Sensitron, Inc., Flexpoint, Inc. and Flexpoint International, LLC. Intercompany transactions and accounts have been eliminated in consolidation.

Use of Estimates The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents Cash and cash equivalents are considered to be cash and a highly liquid security with original maturities of three months or less. The cash and equivalents of $12,680 represent cash on deposit in various bank accounts with two separate financial institutions.

Fair Value of Financial Instruments - The carrying amounts reported in the balance sheets for accounts receivable, accounts payable and accrued liabilities approximate fair value because of the immediate or short-term maturity of these financial instruments. The carrying amounts reported for notes payable approximate fair value because the underlying instruments are at interest rates which approximate current market rates.

Accounts Receivable Trade accounts receivable are recorded at the time product is shipped or services are provided including any shipping and handling fees. Due to the limited amount of transactions, collectability of the trade receivables are reasonably assured; therefore the Company has not created an allowance for doubtful accounts.

Contracts associated with design and development engineering require a deposit of 50% of the quoted price prior to the commencement of work. The deposit is considered deferred income until the entire project is completed and accepted by the customer, at which time the entire contract price is billed to the customer and the deposit applied. As the Company s revenues and customer base increase, an allowance policy will be established.

Inventories Inventories are stated at the lower of cost or market. Cost is determined by using the first in, first out (FIFO) method.

Business Condition The Company suffered losses of $1,690,721 and $2,000,962 and used cash in operating activities of $797,311 and $1,177,735 during the years ended December 31, 2009 and 2008, respectively. At December 31, 2009, the Company had an accumulated deficit of $14,943,734. The Company is in the development stage and has not earned any appreciable revenue during the period from February 24, 2004 (date of emergence from bankruptcy) through December 31, 2009. These matters raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments relating to the recoverability and classification of asset carrying amounts or the amount and classification of liabilities that might result should the Company be unable to continue as a going concern.

On September 11, 2008, R&D Products, LLC, a related company, entered into a long-term Licensing Agreement for their bed technology with a major medical solutions provider (Licensee). The Agreement provides the Licensee the exclusive world wide rights to R&D s patented bed technology for medical applications. On that same day, R&D Products, the Licensee and Flexpoint entered into a long-term joint manufacturing agreement for R&D s bed technology and related products. The manufacturing agreement allows for the Company to manufacture sensors for the bed technology and related products through 2018 with an option to renew each year thereafter. During 2009 the Licensee went through a reorganization that affected its engineering and senior management team. Therefore the ramp up and production schedules and deadlines with resource requirements are being renegotiated.

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

During 2008 and through 2009 the company raised $956,578 in additional capital through the issuance of long and short-term notes to related parties. All of the notes have an annual interest rate of 10% and are secured by the Company s business equipment. The notes also have a conversion feature for restricted common shares ranging from $.15 to $.25 per share with maturity dates from March 31, 2010 to March 31, 2011.

In November and December 2009 the Company issued 1,788,000 in restricted common shares in lieu of cash and canceled $357,200 in Company debt. The shares were issued to satisfy the Company's obligations for investor relations and legal services from 2007 through 2008, and for directors and officers insurance for 2009.

Property and Equipment Property and equipment are stated at cost. Additions and major improvements are capitalized while maintenance and repairs are charged to operations. Upon trade-in, sale or retirement of property and equipment, the related cost and accumulated depreciation are removed from the accounts and any gain or loss is recognized.

Valuation of Long-lived Assets The carrying values of the Company s long-lived assets are reviewed for impairment annually and whenever events or changes in circumstances indicate that they may not be recoverable. When projections indicate that the carrying value of the long-lived asset is not recoverable, the carrying value is reduced by the estimated excess of the carrying value over the projected discounted cash flows. The Company recognized $246,764 of impairment expense for the years ended December 31, 2008. The analysis compared the present value of projected revenues for the next three years against the carrying value of the long-lived assets. The result of the valuation analysis showed an impairment of long-lived assets during 2008, as their carrying values exceeded the present value of the projected revenues. The resultant impairment charges are identified as a line item in the consolidated statement of operations and were applied ratably on the balance sheet to each class of property and equipment and patents and proprietary technology. Under similar analysis no impairment charge was taken during the year ended December 31, 2009. Impairment tests will be conducted on an annual basis and, should they indicate a carrying value in excess of fair value, additional impairment charges may be required.

Intangible Assets Costs to obtain or develop patents are capitalized and amortized over the remaining life of the patents, and technology rights are amortized over their estimated useful lives. The Company currently has the right to several patents and proprietary technology. Patents and technology are amortized from the date the Company acquires or is awarded the patent or technology right, over their estimated useful lives, which range from 5 to 15 years. An impairment charge is recognized if the carrying amount is not recoverable and the carrying amount exceeds the fair value of the intangible assets as determined by projected discounted net future cash flows. The impairment analysis at December 31, 2008 resulted in an impairment charge, as stated in the above section, which was ratably applied to the property and equipment and the intangible assets. Under similar analysis there was no impairment charge taken during the year ended December 31, 2009.

Research and Development Research and development costs are recognized as expense during the period incurred, which is until the conceptual formulation, design, and testing of a process is completed and the process has been determined to be commercially viable.

Goodwill Goodwill represents the excess of the Company s reorganization value over the fair value of net assets of the Company upon emergence from bankruptcy. Goodwill is not amortized, but is tested for impairment annually or when a triggering event occurs using a fair value approach. A fair-value-based test is applied at the overall Company level. The test compares the fair value of the Company to the carrying value of its net assets. This test requires various judgments and estimates. The fair value of the Company is determined using the market value of the Company s common stock. The fair value of the Company is allocated to the Company s assets and liabilities based on their fair values with the excess fair value allocated to goodwill. An impairment of goodwill is measured as the excess of the carrying amount of goodwill over the determined fair value. No impairment of goodwill was recognized during the years ended December 31, 2009 or 2008.

Revenue Recognition Revenue is recognized when persuasive evidence of an arrangement exists, services have been provided or goods delivered, the price to the buyer is fixed or determinable and collectability is reasonably assured. Revenue from the sale of products is recorded at the time of shipment to the customers. Revenue from research and development engineering contracts is recognized as the services are provided and accepted by the customer. Revenue from contracts to license technology to others is deferred until all conditions under the contracts are met and then recognized as licensing royalty revenue over the remaining term of the contracts.

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock-Based Compensation In September 2009, the Financial Accounting Standards Board (FASB) issued Accounting Standards Codification (ASC) Topic 718, Stock Compensation (formerly, FASB Statement No. 123R Revised 2004), Share-Based Payment (SFAS No.123R). SFAS No. 123R supersedes APB 25, under the new pronouncement the Company is required to recognize the cost of employee services received in exchange for stock options and awards of equity instruments based on the grant-date fair value of such options and awards, over the period they vest. Under APB 25, no compensation was recorded in earnings for the Company s stock-based options granted under the 2005 Stock Incentive Plan (the Plan). Under ASC 718, all share-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as an expense in operations over the requisite service period. On January 1, 2006, the Company adopted the provisions of SFAS No. 123R, for its share-based compensations plans and began recognizing the unvested portion of employee compensation from stock options and awards equal to the unamortized grant-date fair value over the remaining vesting period. Furthermore, compensation costs will also be recognized for any awards issued, modified, repurchased, or canceled after January 1, 2006. For the years ended December 31, 2009 and 2008, the Company recognized expense for stock-based compensation under ASC 718 of $122,467 and $237,299, respectively.

Basic and Diluted Loss Per Share Basic and diluted loss per share is computed by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted loss per share is computed by dividing net loss by the weighted-average number of common shares and common equivalents outstanding during the period. At December 31, 2008, there were warrants outstanding to purchase 350,000 shares of common stock which expired September 1, 2009. As of December 31, 2009 there were no warrants outstanding. These warrants were not included in the computation of diluted loss per share as their effect would have been anti-dilutive, thereby decreasing loss per common share.

NOTE 2 PROPERTY AND EQUIPMENT

Depreciation is computed using the straight-line method and is recognized over the estimated useful lives of the property and equipment, which range from three to ten years. Depreciation expense was $121,127 and $137,825 for the years ended December 31, 2009 and 2008, respectively and is included in the administrative and marketing expense on the statement of operations. The company recognized impairment of $246,764 for the year ended December 31, 2008 of which $93,884 was applied to the carrying value of the Company's property and equipment. No impairment was recognized during the twelve months ended December 31, 2009. Property and equipment at December 31, 2009 and 2008 consisted of the following:

Property and Equipment

	December 31, 2009	**2008**
Machinery and equipment	$ 538,349	$ 535,804
Office equipment	40,455	40,455
Furniture and fixtures	13,470	

		13,470
Software	416	416
Total Property and Equipment	592,690	590,145
Less: Accumulated depreciation	(151,111)	(29,984)

Net Property and Equipment
$ 441,579
$ 560,161

24

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 GOODWILL AND INTANGIBLE ASSETS

Intangible Assets The components of intangible assets at December 31, 2009 and 2008 were as follows:

December 31, 2009	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Patents	$ 161,903		

$

(25,800)

$

136,103

Proprietary Technology

799,082

(132,941)

666,141

Total Amortizing Asset

$

960,985

$

(158,741)

$

802,244

December 31, 2008

Gross Carrying Amount

Accumulated Amortization

Net Carrying Amount

Patents	$ 161,903	$ (5,160)	$ 156,743
Proprietary Technology	799,082	(26,588)	772,494
Total Amortizing Asset			

$	960,985
$	(31,748)
$	929,237

Patent amortization was $20,640 and $5,160 for the years ended December 31, 2009 and 2008, and amortization related to proprietary technology was $106,353 and $26,588 for the same periods, respectively. Patent and proprietary technology amortization is charged to operations. The Company recognized impairment of $246,764 for the year ended December 31, 2008 of which $152,880 was applied to the carrying value of the Company's patent and proprietary technology.

Estimated aggregate amortization expense for each of the next five years is $126,993 each year.

Goodwill Intangible assets not subject to amortization as of December 31, 2009 and 2008 consisted of goodwill with a net carrying value of $5,356,414.

During 2004, the Company engaged Houlihan Valuation Advisors, an independent valuation firm, to assess the value of the Company s goodwill and patents at the date of emergence from bankruptcy and the fair value of the proprietary technology at its purchase date. The appraisal was completed during 2005. The Company continues to evaluate the fair value of its intangible assets using similar methods as those used by the valuation firm.

NOTE 4 INCOME TAXES

There was no provision for, or benefit from, income tax during the years ended December 31, 2009 and 2008 respectively. The components of the net deferred tax asset as of December 31, 2009 and 2008, including temporary differences and operating loss carry forwards that arose prior to reorganization from bankruptcy, are as follows:

	December 31,	
	2009	2008
Operating loss carry forwards	$ 6,265,764	$ 5,673,772
Property and equipment	57,902	71,055
Patents and proprietary technology	81,910	75,969
Stock-based compensation	658,768	613,087
Total Deferred Tax Assets	7,064,344	

		6,433,883
Valuation allowance	(7,064,344)	(6,433,883)
Net Deferred Tax Asset	$ -	$ -

25

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Federal and state net operating loss carry forwards at December 31, 2009 and 2008 were $16,798,294 and $15,211,185, respectively. A portion of the net operating loss carry forwards includes losses incurred prior to February 24, 2004, when a change of greater than 50% in ownership of the Company occurred. As a result of the change of ownership, only a portion of the net operating loss carry forwards incurred prior to the change becomes available each year. The net operating loss carry forwards begin to expire in 2020.

The following is a reconciliation of the amount of benefit that would result from applying the federal statutory rate to pretax loss with the provision for income taxes for the years ended December 31, 2009 and 2008, respectively:

For the Years Ended December 31,				
	2009		**2008**	
Tax at statutory rate (34%)	$	(574,845)	$	(680,327)
Non-deductible expenses				

	178	650
Change in valuation allowance	630,461	745,708
State tax benefit, net of federal tax effect	(55,794)	(66,031)
Provision for Income Taxes	$ -	$ -

NOTE 5 CONVERTIBLE NOTES PAYABLE

During the year ended December 31, 2009 the Company secured $684,378 of short and long-term financing from related parties, which represents notes with maturity dates ranging from March 31, 2010 to March 31, 2011, and paid $50,000 in principal to retire one of the related party notes. Also a $22,200 note due on March 31, 2010, was issued to finance insurance. The proceeds were used for operations and to finance the Company's annual directors and officers insurance. In November 2009 this note was converted to stock and a loss of $7,800 was recognized due to the difference of the intrinsic value of the stock issued compared to the stated beneficial conversion feature of the note. All of the notes have an annual interest rate of 10% and are secured by the Company s business equipment. The notes also have a conversion feature for restricted common shares ranging from $.15 to $.25 per share. Due to the difference of the market price of the common stock associated with the conversion features of the notes and the conversion price, the convertible notes resulted in a net beneficial conversion feature of $183,655, which was recognized as a debt discount and an increase to additional paid-in capital. The calculation for the intrinsic value of the beneficial conversion feature was the difference between the conversion price of the common stock and the market value on the date the notes were executed multiplied by the number of shares into which the notes may be converted. The debt discount will be amortized from the date the notes were executed through the maturity date of the notes. In November 2008 the Company secured $300,000 of short-term financing from three related parties.

In addition, the Company was able to extend the maturity of $200,000 of the existing related party notes payable, until May 31, 2010, and $100,000 until March 31, 2011 which originally matured on May 31, 2009.

NOTE 6 COMMON STOCK

Private Placement of Common Stock and Warrants From January 25, 2005 through March 31, 2005, the Company issued 2,836,335 shares of common stock and warrants to purchase 2,836,335 shares of common stock at $3.00 per share from October 1, 2005 through September 30, 2007 in a private placement offering. The Company realized proceeds of $3,907,207, net of $347,294 of cash offering costs. As part of this private placement, the Company also issued to the placement agent 140,000 shares of common stock and 140,000 warrants exercisable at $3.00 per share for the agent s services in connection with the offering. The fair value of the warrants issued was $4,047,816 as estimated by the Company using the Black-Scholes pricing model with the following assumptions: risk free interest rate of 4.58%; volatility of 200%; estimated life of two years; and dividend yield of 0%. The net proceeds were allocated to the shares of common stock and the warrants based upon their relative fair values and resulted in allocating $1,980,271 to the shares of common stock and $1,926,937 to the warrants. All outstanding warrants issued in this transaction have expired and were never exercised.

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Two additional private placements of common stock were completed during 2007. The Company issued 1,500,000 shares of common stock resulting from these transactions. In the first transaction, completed in June 2007, the Company realized $1,000,000 for the placement of 1,000,000 shares of common stock at $1.00 per share. In September 2007, the Company received an additional $500,000 for the placement of 500,000 shares of common stock at $1.00 per share to related parties. The cumulative $1,500,000 received by the Company represented net proceeds from these transactions, as there were no fees connected to either of the private placements.

On November 5, 2009, in lieu of paying cash for the Company's Directors and Officers Insurance the Company issued 120,000 restricted shares to the owner of Universal Business Insurance and canceled the Company's debt of $22,200.

On December 1, 2009 the Company issued 743,000 restricted shares, in lieu of cash, to the Chesapeake Group for Investor Relations services performed during 2009 and canceled $150,000 of the Company's debt.

On December 9, 2009 the Company issued 550,000 restricted shares, in lieu of cash, to the Chesapeake Group for Investor Relations services performed during 2009 and canceled $110,000 of the Company's debt.

On December 15, 2009 the Company issued 375,000 restricted shares, in lieu of cash, to Kevin Howard Esq. for legal services provided from 2007 to 2008 and canceled $75,000 of the Company's debt.

SB-2 Registration On August 4, 2005, the Company registered 8,932,670 shares of common stock, including 3,656,335 warrants to purchase common stock at some future date. The Company registered 5,952,670 shares related to the private placement in March 2005, 30,000 warrants to purchase common stock held by Investors Stock Daily, Inc., 650,000 warrants to purchase common stock held by Summit Resource Group, and an additional 2,300,000 shares held by certain investors. The Company filed a post effective amendment extending this registration on October 10, 2006. This registration statement is no longer effective.

Expiration of Warrants In September 2009 warrants issued to Summit Resource Group for services expired.

The following table summarizes the activity of warrants outstanding for the years ended December 31, 2009 and 2008:

Warrants	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life
Outstanding at December 31, 2007	350,000	$ 0.80	1.17
Expired			

-

-

-

Outstanding at December 31, 2008

350,000

0.80

1.17

Expired

350,000

0.80

-

Outstanding at December 31, 2009

-

$

-

-

NOTE 7 STOCK OPTION PLANS

On August 25, 2005, the Board of Directors of the Company approved and adopted the 2005 Stock Incentive Plan (the Plan). The Plan became effective upon its adoption by the Board and will continue in effect for ten years, unless terminated. This plan was approved by the stockholders of the Company at their annual meeting of shareholders on November 22, 2005. Under the Plan, the exercise price for all options issued will not be less than the average quoted closing market price of the Company s trading common stock for the thirty day period immediately preceding the grant date plus a premium of ten percent. The maximum aggregate number of shares that may be awarded under the plan is 2,500,000 shares.

The Company continues to utilize the Black-Scholes option-pricing model for calculating the fair value as defined by ASC Topic 718, which is an acceptable valuation approach under ASC 718. This model requires the input of subjective assumptions, including the expected price volatility of the underlying stock.

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Projected data related to the expected volatility and expected life of stock options is based upon historical and other information, and notably, the Company s common stock has limited trading history. Changes in these subjective assumptions can materially affect the fair value of the estimate, and therefore, the existing valuation models do not provide a precise measure of the fair value of the Company s employee stock options.

On August 25, 2005, the Company granted options to employees to purchase an aggregate 1,159,000 shares of common stock at an exercise price of $1.91 per share. These options vested over three years on either the employee s employment anniversary date or on the anniversary date specified in the grant, and expire 10 years from date of grant. The Company used the following assumptions in estimating the fair value of the options granted on August 25, 2005: market value at time of issuance - $1.73; expected term 8 years; risk-free interest rate 4.18%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted have a weighted-average fair value of $1.72 per share.

On February 27, 2006, the Company granted employee options to purchase an aggregate 75,000 shares of common stock at an exercise price of $2.07 per share. The options vested over three years on the employee s employment anniversary and expire 10 years from date of grant. The Company used the following assumptions in estimating the fair value of the options granted on February 27, 2006: market value at time of issuance - $2.00; expected term 7 years; risk-free interest rate 4.26%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted had a weighted-average fair value of $1.99 per share.

During September 2006, the Company changed accounting estimates related to potential forfeitures of options under the Plan from 0% to 7% in order to more closely reflect actual forfeitures to date. During 2007, based on further analysis of forfeitures, the estimate for potential forfeitures was increased to 15% for grants awarded in August 2005, 10% for grants awarded in February 2006, and 30% for awards made during 2007.

On February 8, 2007, the Company granted employee options to purchase an aggregate 382,000 shares of common stock at an exercise price of $1.18 per share. The options vested on the anniversary of the grant date and expire on August 25, 2015, which is 10 years from date of Board approval of the Plan. The Company used the following assumptions in estimating the fair value of the options granted on February 8, 2007: market value at time of issuance - $1.45; expected term 6 years; risk-free interest rate 4.86%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted had a weighted-average fair value of $1.43 per share.

On June 4, 2007, the Company granted an employee options to purchase an aggregate 300,000 shares of common stock at an exercise price of $1.38 per share. The options vested on the anniversary of the grant date and expire on August 25, 2015, which is 10 years from date of Board approval of the Plan. The Company used the following assumptions in estimating the fair value of the options granted on June 4, 2007: market value at time of issuance - $1.13; expected term 6 years; risk-free interest rate 4.93%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted had a weighted-average fair value of $1.11 per share. The individual's employment with the Company terminated in August 2008. Under the plan, at the time of termination the vested options must either be exercised within 30 days of termination of employment or they expire, and the non vested options are forfeited. Because the vested options were never exercised they expired.

On October 18, 2007, the Company granted an employee options to purchase an aggregate 75,000 shares of common stock at an exercise price of $1.26 per share. The options vest on the anniversary of the grant date and expire on August 25, 2015, which is 10 years from date of Board approval of the Plan. The Company used the following assumptions in estimating the fair value of the options granted on October 18, 2007: market value at time of issuance - $1.09; expected term 6 years; risk-free interest rate 4.93%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted have a weighted-average fair value of $1.08 per share.

On August 8, 2008, the Company granted employee options to purchase an aggregate 165,000 shares of common stock at an exercise price of $.72 per share. The options vest over three years beginning on the anniversary of the grant date and expire on August 25, 2015, which is 10 years from date of Board approval of the Plan. The Company used the following assumptions in estimating the fair value of the options granted on August 8, 2008; market value at time of issuance $.70; expected holding period 5 years; risk-free

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

interest rate 4.93%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted had a weighted-average fair value of $.68 per share.

On April 22, 2009 the Company granted options to employees to purchase an aggregate of 350,000 shares of common stock at an exercise price of $0.33 per share. The options vest in two equal installments on December 31, 2009 and December 31, 2010 and expire on August 25, 2015, which is 10 years from date of Board approval of the Plan. The Company used the following assumptions in estimating the fair value of the options granted on April 22, 2009; market value at time of issuance - $0.24; expected holding period 5 years; risk-free interest rate 4.93%; dividend yield 0%; and expected volatility 200%. Using these assumptions, the options granted have a weighted-average fair value of $0.23 per share.

During the years ended December 31, 2009 and 2008, the Company recognized $122,467 and $237,299 of stock-based compensation expense, respectively. There were 1,629,000 and 1,432,000 employee stock options outstanding at December 31, 2009 and 2008, respectively.

A summary of all employee options outstanding and exercisable under the plan as of December 31, 2009, and changes during the year then ended is set forth below:

Options

Shares

Weighted

Average

		Exercise Price	**Weighted Average Remaining Contractual Life (Years)**	**Aggregate Intrinsic Value**
Outstanding at the beginning of period	1,432,000	$ 1.61	6.68	$ -
Granted	350,000	0.33	-	-
Expired	(95,000)			

	1.57	-	-	
Forfeited	(58,000)	0.53	-	-
Outstanding at the end of Period	1,629,000	1.38	5.68	-
Exercisable at the end of Period	1,363,000	1.54	5.68	-

A summary of all employee options outstanding and exercisable under the plan as of December 31, 2008, and changes during the year then ended is set forth below:

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at the beginning of period	1,607,000			

$

1.66

-

$

-

Grant

165,000

0.72

-

-

Expired

(140,000)

1.48

-

-

Forfeited

(200,000)

1.38

-

-

Outstanding
at end of year

1,432,000

1.61

6.68

-

Exercisable at the end of the year
1,192,000
1.74
6.68
-

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2009, there was approximately $30,568 of unrecognized compensation cost related to employee stock options that will be recognized over a weighted average period of approximately 1.56 years.

NOTE 8 LEASE COMMITMENT

Effective March 31, 2004, the Company agreed to sub-lease offices and a manufacturing facility in which the Company s acquired equipment is located, with monthly lease payments of $5,500 plus common area maintenance fees. The lease expired in September 2004. During July 2004, the Company entered into a new five-year lease agreement with average monthly payments including prescribed common area fees of $8,718, with a 2% annual increase in lease payments. Rent expense is recognized on a straight-line basis over the term of the lease. In April 2009, the Company amended the operating lease agreement for its manufacturing facility in Draper, Utah. Under the new terms of the Company's operating lease the average monthly payments are $7,950, including common area maintenance through December 31, 2010. This amount increases to $8,450 during the final year of the lease ending December 31, 2011.

The table below is a summary of future minimum lease payments as of December 31, 2009:

Year Ended December 31,		
2010	$	95,400
2011	$	

		101,400
Total minimum lease payments	$	196,800

For the years ended December 31, 2009 and 2008 rent expense was $98,486 and 105,722, respectively.

NOTE 9 RELATED PARTY MANUFACTURING CONTRACT

In September 2005, the Company entered into a manufacturing agreement with R&D Products, LLC, a Utah limited liability company, doing business in Midvale, Utah. For the purpose of this contract, management considers R&D Products to be a Related Party because a controlling member of R&D Products, LLC owns a non-controlling interest as a shareholder of Flexpoint Sensor Systems, Inc. R&D Products has developed a mattress with multiple air chambers that uses the Company s Bend Sensor® and the Company has agreed to manufacture the Bend Sensor® for the mattresses. The initial order was for 30,000 Bend Sensor® to be used to begin manufacture of 1,000 mattresses. R&D Products deposited $50,000 with the Company in the 4th quarter of 2007 related to this contract and another $50,000 was deposited during the first quarter of 2008. Throughout 2008 Flexpoint completed the engineering, electronic development and design of a Medical bed, and delivered prototypes to R&D Products. With the delivery of the prototypes and R&D signing off on the final engineering, Flexpoint recognized the $100,000 deposited by R&D as income during the year.

On September 11, 2008 R&D Products, LLC entered into a long-term Licensing Agreement for their bed technology with a major medical solutions provider (Licensee). The Agreement provides the Licensee the exclusive world wide rights to R&D s patented bed technology. On that same day Flexpoint, R&D Products and the Licensee entered into a long-term joint manufacturing agreement for R&D s bed technology and related products. The manufacturing agreement allows for the Company to manufacture sensors for the bed technology and related products through 2018 with an option to renew each year thereafter. Production schedules with specific quantities and deadlines are still being outlined.

FLEXPOINT SENSOR SYSTEMS, INC. AND SUBSIDIARIES

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 10 LEGAL PROCEEDINGS

On January 20, 2006, Sensitron, Inc. filed a complaint in the United States District Court for the District of Utah, Central Division, against Michael W. Wallace, d/b/a Pure Imagination, seeking patent rights for a patent and patent application that Mr. Wallace filed with the United State Trademark and Patent Office. Mr. Wallace assisted Sensitron with the development of certain software to be used in combination with Sensitron's Bend Sensor® technology related to the SEAT MAT system. The complaint alleges that Mr. Wallace failed to deliver the source code to Sensitron and failed to list Sensitron and Flexpoint's employees and previous employees as co-inventors on the patent he obtained and for his pending application for a patent. Sensitron is seeking a copy of the source code and ownership of the patent and/or correction of the patent and patent application to add the appropriate co-inventors. Sensitron was also seeking unspecified damages along with its costs and attorneys fees. On May 1, 2009, the Company negotiated a settlement agreement on the legal action and patent encroachment that was filed against Michael W. Wallace, d/b/a Pure Imagination, in January 2006. The complaint alleged that Mr. Wallace filed for patent rights and protection using certain software in combination with Sensitron's Bend Sensor® technology related to the SEAT MAT for which Mr. Wallace assisted the Company in developing and was paid by the Company for his services. In his patent filing Mr. Wallace failed to list the Company, its employees and previous employees as co-inventors on the patent he obtained and for his pending application for a patent. The Company sought a copy of the source code and ownership of the patent and/or correction of the patent and patent application to add the appropriate co-inventors. Under the terms of the settlement there is an option to purchase the rights to the patent, but the Company is under no obligation to exercise the option. On May 15, 2009 the Company received approval of the settlement by the court and the legal action was dismissed.

In the spring of 2009 the Company filed legal action against Images SI, Inc for selling and distributing a Bend Sensor® type product and claimed that the product being sold was a patent encroachment on the Bend Sensor® patent owned by Sensitron a wholly owned subsidiary of the Company. Prior to December 31, 2009 the companies reached a settlement agreement whereby Flexpoint will receive royalties based upon sales of the Bend Sensor® type products sold by Images SI, Inc.

On July 3, 2001, Flexpoint Sensor Systems, Inc. filed a voluntary petition for reorganization pursuant to Chapter 11 of the United States Bankruptcy Code. The petition was filed in the United States Bankruptcy Court for the District of Utah, File No. 01-29577JAB. On February 24, 2004, the bankruptcy court confirmed the plan of reorganization. In the bankruptcy proceeding, the Company objected to the $1,700,000 claim made by Delco Electronics, Inc. (Delphi) and asserted that Delphi is precluded by the terms of the agreement from any financial recovery due to its breach of the sponsorship agreement. Other potential claims are breach of contract, breach of fiduciary duties owed to Flexpoint, Inc. pursuant to the contract, and intentional and negligent interference with Flexpoint, Inc. s contractual and business relationship with General Motors. As of the report date, neither party is actively pursuing this action.

NOTE 11 - SUBSEQUENT EVENTS

The Company has evaluated subsequent events after the balance sheet date of December 31, 2009 through the date the financial statements were issued and had determined that there are no events that would have a material impact on the financial statements.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

We have not had a change in or disagreement with our independent accountant during the last two fiscal years.

ITEM 9A(T). CONTROLS AND PROCEDURES

As of the end of the period covered by this Annual Report, we carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that information required to be disclosed is recorded, processed, summarized and reported within the specified periods and is accumulated and communicated to management, including our President and Secretary, to allow for timely decisions regarding required disclosure of material information required to be included in our periodic Securities and Exchange Commission reports. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives and our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective to a reasonable assurance level of achieving such objectives. However, it should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. In addition, we reviewed our internal controls, and there have been no significant changes in our internal controls or in other factors in the last year that has materially affected or is reasonably likely to materially affect our internal control over financial reporting.

Evaluation of Disclosure Controls and Procedures. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective such that the information required to be disclosed by us in reports filed under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities Exchange Commission s rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Management s Annual Report on Internal Control over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the

Exchange Act). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes of accounting principles generally accepted in the United States.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance of achieving their control objectives.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our internal control over financial reporting as of December 31, 2009. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control Integrated Framework. Based on this evaluation, our management, with the participation of the President and Secretary/Treasurer, concluded that, as of December 31, 2009, our internal control over financial reporting was effective.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management s report was not subject to attestation by our registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit us to provide only management s report in this annual report.

Changes in internal control over financial reporting. There have been no changes in internal control over financial reporting during the fourth quarter of 2009 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS AND EXECUTIVE OFFICERS

Our directors and executive officers are listed below, with their respective ages, positions and biographical information. Our bylaws provide that the directors shall be divided into three classes. A class of directors shall be elected for a one-year term, a class of directors for a two-year term and a class of directors for a three-year term. At each succeeding annual meeting of stockholders, successors to the class of directors whose term expires at that meeting shall be elected for a three-year term. Our executive officers are chosen by our board of directors and serve at its discretion. There are no family relationships between or among any of our directors and executive officers.

Name	Age	Position Held	Director Term of Office
Clark M. Mower	63	President, CEO and Director	From November 2005 until next annual meeting
John A. Sindt	65	Chairman of the Board	From November 2005 until next annual meeting
Ruland J. Gill, Jr.			

64

Director

From November 2005 until next annual meeting

Thomas N. Strong

54

Controller and Chief Financial Officer

Clark M. Mower Mr. Mower was appointed our President and CEO in January 2005. He was appointed as Director, President and CEO of Sensitron in February 2005. In November 2005 he was elected to serve a one year term as director (or until the next annual meeting). He formerly served as Senior Vice President - Mergers and Acquisitions - Merchant Energy Group for El Paso Energy Corporation (NYSE: EP). From August 2002 through 2004 he was the managing member of Polaris Energy, LLC, a non-affiliated consulting company to energy related mergers and acquisition. From August 2002 to July 2004 he was a management committee member for Saguaro Power Company, a non-affiliated company operating a 100 megawatts power plant in Henderson, Nevada. Prior to that he served as President and Chief Executive Officer of Bonneville Pacific Corporation (a public company) for eight years until El Paso Corporation acquired Bonneville Pacific Corporation in October 1999. He has not been involved in any legal proceedings during the past ten years that are material to an evaluation of his ability or integrity.

John A. Sindt Mr. Sindt has served as a director of the company since 1999 and served as President and Chief Executive and Financial Officer from 2001 to 2004. He served as Secretary/Treasurer from January 2005 through July 2005. In November 2005 he was elected to serve a two year term as director (or until the next annual meeting). Mr. Sindt is also the Chairman of the Board of Sensitron, one of our subsidiaries. He has been employed since 1965 as a Salt Lake County, Utah Constable and he currently heads that department. He has also served as President, Corporate Secretary and Director for the National Constables Association. He has owned and operated a successful chain of retail jewelry stores in Utah. He has not been involved in any legal proceedings during the past ten years that are material to an evaluation of his ability or integrity.

Ruland J. Gill, Jr. - Mr. Gill retired from Questar Corporation (NYSE: STR) where he served as Vice President of Government Affairs and Senior Attorney from 1973 until his retirement in 2008. He was appointed as a Director of Sensitron in February 2005. In addition to his professional career, Mr. Gill has held several important positions including President of the Utah Petroleum Association, and Trustee of the Rocky Mountain Mineral Law Foundation. He is also a current Board member of Prime Snax, a privately held company. He has not been involved in any legal proceedings during the past ten years that are material to an evaluation of his ability or integrity.

Thomas N. Strong   Prior to accepting the position of Controller and Chief Financial Officer of Flexpoint in August 2008, Mr. Strong was employed by Praxair Healthcare Services as a Regional Financial Analyst, and part of his responsibilities with this provider of medical gases and equipment was to direct that company s regional compliance with the Sarbanes-Oxley Act of 2002. From 2002 to 2005 he was employed as Regional Corporate Controller for INVE America and Subsidiaries, an international agriculture and aquaculture company responsible for the accounting, financial reporting and treasury duties for all of North and South America. Mr. Strong has over 20 years experience in the accounting field, primarily in controller positions. He has not been involved in any legal proceedings during the past ten years that are material to an evaluation of his ability or integrity.

AUDIT COMMITTEE

Our audit committee consists of Messrs. Mower and Gill, with Mr. Gill serving as Chairman. Our audit committee has a charter and management believes Mr. Gill qualifies as an audit committee financial expert because of his extensive experience in finance. Based upon the definition of independent director under NASDAQ Stock Market Rule 4200(a)(15), Mr. Gill is independent of management. However, Mr. Mower is not independent of management.

CODE OF ETHICS

We adopted a Business Ethics and Code of Conduct in November 2000. Upon written request we will provide a copy of the Business Ethics and Code of Conduct to any person without charge. Address your request to:

Shareholder Communications

Flexpoint Sensor Systems, Inc.

106 West Business Park Drive

Draper, Utah 84020

COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers and persons who own more than five percent of a registered class of our equity securities to file with the Securities and Exchange Commission initial reports of ownership and reports of changes in ownership of our common stock. Officers, directors and ten-percent or more beneficial owners of our common stock are required by SEC regulations to furnish Flexpoint Sensor with copies of all Section 16(a) reports they file and provide written representation that no Form 5 is required. Based upon a review of these forms furnished to us during the fiscal year ended December 31, 2009, we believe that all required reports were filed as required by the SEC.

ITEM 11. EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

Compensation Objectives -- Our compensation philosophy is to align executive compensation with the interests of stockholders, attract, retain and motivate a highly competent team of executives, and link pay to performance.

Base Salary -- Base salaries for our executives depend on the scope of their responsibilities and their performance. Base salary is designed to compensate the executives for services rendered during the year. These salaries are compared to amounts paid to the executive s peers outside our Company. As we have not yet established a Compensation Committee, salary levels are typically reviewed annually by the Board of Directors performance review process, with increases based on the assessment of the performance of the executive.

Long-term Compensation -- The Board of Directors determined that long-term incentive compensation would be in the form of stock options granted. We have a stock option plan and implemented which has been approved by the shareholders to provide long-term compensation to directors and employees of the company.

Perquisites -- The only material perquisite provided to our executive officers is reimbursement for use of a personal automobile while engaged on company business.

Retirement Benefits -- As a development stage company, we have no retirement benefits currently in place. It is the intent of the company to add such benefits at a future date.

Employee agreements -- We have not entered into employment contracts with our executive officers and their compensation is determined at the discretion of our board of directors.

Termination and Change of Control Payments -- The Company does not currently have employment agreements with its executive officers and there are no agreements providing for severance should a change of control take place

SUMMARY COMPENSATION TABLE

The following table shows the compensation paid to our principal executive officer, principal financial officer, and our most highly compensated executive officer for the last two fiscal years:

Name and Principal Position	Year	Salary ($)	Option Awards (1) ($)	All Other Compensation ($)

Total

($)

Clark M. Mower, President, CEO and Director

2009

2008

$119,188

$154,500

$33,000

0

0

0

$152,188

$154,500

John A. Sindt, Chairman.

2009

2008

$ 2,000

$ 12,000

0

0

0

0

$2,000

$12,000

Thomas N. Strong

Controller/CFO.

2009

2008

$76,000

$50,000 (2)

$28,380

$82,090

0

0

$104,380

$132,090

(1)

Represents value of options granted computed in accordance with FASB ASC Topic 718.

(2)

Represents compensation from Mr. Strong s hire date of August 1, 2008.

OUTSTANDING EQUITY AWARDS

The following table shows outstanding equity awards granted to the above named executive officers as of December 31, 2009.

Option Awards
Name (a)
Number of Securities Underlying Unexercised Options (#)

Exercisable

(b)

Number of

Securities

Underlying

Unexercised

Options

(#)

Unexercisable

(c)

Equity

Inventive Plan

Awards:

Number of

Securities

Underlying

Unexercised

Unearned

Options

(#)

(d)

Option

Exercise

Price

($)

(e)

Option

Exercise

Date

(f)

Clark M. Mower, CEO, President and Director

300,000

100,000

50,000 (2)

50,000 (2)

0

0

0

$1.91

$1.18

$.33

12/31/15

8/25/15

8/25/15

John A. Sindt, Principal Financial Officer and Director

180,000

0

0

$1.91

12/31/15

Thomas N. Strong

40,000

43,000 (3)

80,000 (1)

43,000 (3)

0

$.72

$.33

8/25/15

8/25/15

(1)

Options for 40,000 shares vest on August 1, 2010; options for 40,000 shares vest on August 1, 2011.

(2)

Options for 50,000 vested on December 31, 2009; options for 50,000 shares vest on December 31, 2010

(3)

Options for 43,000 vested on December 31, 2009; options for 43,000 shares vest on December 31, 2010

DIRECTOR COMPENSATION

We paid $2,000 in compensation to our Chairman during the fiscal year ended December 31, 2009. We do not have any standard arrangement for compensation of our directors for any services provided as a director, including services for committee participation or for special assignments.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

SECURITIES UNDER EQUITY COMPENSATION PLANS

The following table lists the securities authorized for issuance under any equity compensation plans approved by our shareholders and any equity compensation plans not approved by our shareholders as of December 31, 2009. This chart also includes individual compensation arrangements described below.

EQUITY COMPENSATION PLAN INFORMATION

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,629,000		

		$ 1.38	871,000
Equity compensation plans not approved by security holders	0	$ 0.00	0
Total	1,629,000	$ 1.38	871,000

2005 Stock Incentive Plan

On August 25, 2005, our Board adopted the Flexpoint Sensor Systems, Inc. 2005 Stock Incentive Plan (the Plan). The purposes of the Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to employees, directors and consultants, and to promote the success of our business.

The Plan became effective upon its adoption by the Board and shall continue in effect for a term of ten (10) years, unless terminated. The maximum aggregate number of shares of common stock that may be sold under the Plan is 2,500,000 shares. The term of each option and its exercise price shall be stated in an option agreement; provided that the term does not exceed ten (10) years from the date of grant. The plan provides that a grant of a stock option to an employee shall have an exercise price of no less than 110% of the fair market value per share on the date of grant. As a condition of the grant, vesting or exercise of an option granted under the Plan, the participant shall be required to satisfy any applicable federal, state, local or foreign withholding tax obligations that may arise in connection with the grant, vesting or exercise of the option or the issuance of shares.

The Plan is administered by our Compensation Committee and the Board may from time to time increase the size of any Compensation Committee and appoint additional members, remove members (with or without cause) and appoint new members in substitution, fill vacancies and/or remove all members of the committee. The Compensation Committee may be composed of employee/director(s), non-employee/director(s) and/or major stockholder(s) of the company who are not a director.

Non-statutory stock options may be granted to employees, directors and consultants who have the capacity to contribute to the success of the company. Incentive stock options may be granted only to employees, provided that employees of affiliates shall not be eligible to receive incentive stock options.

BENEFICIAL OWNERSHIP

The following table lists the beneficial ownership of our outstanding common stock by our management and each person or group known to us to own beneficially more than 5% of our voting common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Based on these rules, two or more persons may be deemed to be the beneficial owners of the same securities. Except as indicated by footnote, the persons named in the table below have sole voting power and investment power with respect to the shares of common stock shown as beneficially owned by them. The percentage of beneficial ownership is based on 26,580,887 shares of common stock outstanding as of March 27, 2010, plus any shares which each of the following persons may acquire within 60 days by the exercise of rights, warrants and/or options.

CERTAIN BENEFICIAL OWNERS

Name and address of beneficial owner	Amount and nature of beneficial ownership	Percent of class
First Equity Holdings Corp. First Equity Holdings Corp. 2157 S. Lincoln Street Salt Lake City, Utah 84106	5,985,858 (1)	22.5

(1) Includes 730,000 shares held by an officer of First Equity Holdings Corp.

MANAGEMENT

Name of beneficial owner	Amount and nature of beneficial ownership	Percent of class
Clark M. Mower	1,105,000 (1)	4.1
John A. Sindt	1,611,326 (2)	6.0
Ruland J. Gill, Jr	191,470 (3)	Less than 1%
Thomas N. Strong	86,500 (4)	Less than 1%
Directors and officers as a group	2,994,296	10.9

(1)

Represents 655,000 shares and vested options to purchase 450,000 shares.

(2)

Represents 1,233,338 shares held by Mr. Sindt, 180,000 vested options and he has investment power with respect to 197,988 shares.

(3)

Represents 28,350 shares held by Mr. Gill and 163,120 shares held in a family trust.

(4)

Represents 3,500 shares and vested options of 83,000.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

TRANSACTIONS WITH RELATED PARTIES

On November 10, 2008, we executed a promissory note to First Equity Holdings Corp., a major stockholder, in the principal amount of $100,000, with 10% interest per annum. If we fail to pay the amount due, a late rate of interest of 15% applies to the outstanding balance. First Equity Holdings Corp. beneficially owns 22.5% of our outstanding common stock. During 2009, we extended this note and its accrued interest until March 31, 2011.

During 2009, First Equity Holding Corp. has continued to finance the Company under similar terms. At the end of the third quarter 2009 the Company consolidated all of the short-term notes held by First Equity into a single long-term note in the principal amount of $387,186, with 10% interest per annum. The note is due and payable, with accrued interest on or before March 31, 2011. The consolidated note provides an option to First Equity to convert the amount due into restricted common stock at $0.15 per share. On December 30, 2009 the Company issued an additional note for $25,000 to First Equity, with interest of 10% and is due and payable on March 31, 2010. The note carries the right to convert the amount due into our restricted common stock at $0.20 per share. All notes are secured by a portion of our business equipment.

DIRECTOR INDEPENDENCE

We believe Ruland J. Gill, Jr. in an independent director as defined under NASDAQ Stock Rule 4200(a)(15). This rule defines persons as "independent" who are neither officers nor employees of the company and have no relationships that, in the opinion of the board of directors, would interfere with the exercise of independent judgment in carrying out their responsibilities as directors

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

ACCOUNTANT FEES

The following table presents the aggregate fees billed for each of the last two fiscal years by our independent registered public accounting firm, Hansen Barnett & Maxwell, Certified Public Accountants, in connection with the audit of our financial statements and other professional services rendered by that accounting firm.

	2009	2008
Audit fees	$ 26,304	$ 35,360
Audit-related fees	0	0
Tax rel Tax fees	$ 1,600	

$ 1,600

All othe All other fees

0

0

Audit fees represent the professional services rendered for the audit of our annual financial statements and the review of our financial statements included in quarterly reports, along with services normally provided by the accounting firm in connection with statutory and regulatory filings or engagements. Audit-related fees represent professional services rendered for assurance and related services by the accounting firm that are reasonably related to the performance of the audit or review of our financial statements that are not reported under audit fees.

Tax fees represent professional services rendered by the accounting firm for tax compliance, tax advice, and tax planning. All other fees represent fees billed for products and services provided by the accounting firm, other than the services reported for the other categories.

PRE-APPROVAL POLICIES

Our audit committee makes recommendations to our board of directors regarding the engagement of an auditor. Our board of directors approves the engagement of the auditor before the firm renders audit and non-audit services. Our audit committee does not rely on pre-approval policies and procedures.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

The audited financial statements of Flexpoint Sensor Systems, Inc are included in this report under Item 8 on pages 18 to 34.

(a)(2) Financial Statement Schedules

All financial statement schedules are included in the footnotes to the financial statements or are inapplicable or not required.

(a)(3) Exhibits

The following documents have been filed as part of this report

No.

Description

3.1 Certificate of Incorporation of Flexpoint Sensor, as amended (Incorporated by reference to exhibit 3.1 for Form 10-QSB, filed

August 4, 2006)

3.2 Bylaws of Flexpoint Sensor, as amended (Incorporated by reference to exhibit 3.4 of Form 10-QSB, filed May 3, 2004)

10.1 Lease Agreement between Flexpoint Sensor and F.G.B.P., L.L.C., dated July 12, 2004 (Incorporated by reference to exhibit of Form

10-QSB, filed November 15, 2004, as amended)

10.2 Flexpoint Sensor Systems, Inc. 2005 Stock Incentive Plan (Incorporated by reference to Schedule 14A, filed October 27, 2005)

10.3 Promissory Note between Flexpoint Sensor and First Equity Holdings Corp., dated September 30, 2009

20.2 Audit Committee Charter (Incorporated by reference to Schedule 14A, filed October 27, 2005)

21.1 Subsidiaries of Flexpoint Sensor Systems, Inc.

31.1 Certification of Clark M. Mower pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

31.2 Certification of Thomas N. Strong pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32.1 Certification pursuant to 18 U.S.C Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FLEXPOINT SENSOR SYSTEMS, INC.

Date: April 7, 2010

By: *_/s/ Clark M. Mower_*

Clark M. Mower, President

In accordance with Section 13 or 15(d) of the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Date: April 7, 2010

*_/s/ Clark M. Mower_*

Clark M. Mower

President, Chief Executive Officer and Director

Date: April 7, 2010

*_/s/ John A. Sindt_*

John A. Sindt

Chairman of the Board

Date: April 7, 2010

/s/ Thomas N. Strong

Thomas N. Strong

Controller, Chief Financial Officer