MATERIAL TECHNOLOGIES INC /CA/
Form SB-2
June 15, 2006

As filed with the Securities and Exchange Commission on June 15, 2006
An Exhibit List can be found on page II-11.
Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549

FORM SB-2
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MATERIAL TECHNOLOGIES, INC.
(Name of small business issuer in its charter)

Delaware	**3823**	**95-4622822**
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

11661 San Vicente Boulevard, Suite 707
Los Angeles, California 90049
(310) 208-5589
(Address and telephone number of principal executive offices and principal place of business)

Robert M. Bernstein, Chief Executive Officer
MATERIAL TECHNOLOGIES, INC.
11661 San Vicente Boulevard, Suite 707
Los Angeles, California 90049
(310) 208-5589
(Name, address and telephone number of agent for service)

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APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC: From time to time after this Registration Statement becomes effective.

If any securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [ ]

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Class A Common stock issuable upon conversion of debenture	18,518,519 (2)	$0.10(3)	$1,851,851.85	$198.15
Class A Common Stock issuable upon exercise of warrants	50,000,000(4)	$0.01(5)	$500,000.00	$53.50
Class A Common Stock, par value $0.001 per share	735,747(6)	$0.10(3)	$110,362.05	$7.87
Total	**69,254,266**			**$259.52**

(1) Includes shares of our common stock, par value $0.001 per share, which may be offered pursuant to this registration statement, which shares are issuable upon conversion of a convertible debenture and the exercise of warrants held by a selling stockholder. In addition to the shares set forth in the table, the amount to be registered includes a good faith estimate of the number of shares issuable upon conversion of the debenture. The amount to be registered also includes shares of common stock issuable upon exercise of the warrants, as such number may be adjusted as a result of stock splits, stock dividends and similar transactions in accordance with Rule 416. Should the conversion ratio of our convertible debenture result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary. In addition, should a decrease in the exercise price as a result of an issuance or sale of shares below the then current market price, result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary.

(2) Includes a good faith estimate of the shares (150%) underlying convertible debenture to account for market fluctuations.

(3) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, using the average of the high and low price as reported on the Over-The-Counter Bulletin Board on June 7, 2006, which was $0.10 per share.

(4) Includes shares underlying warrants exercisable at $0.01 per share.

(5) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(g) under the Securities Act of 1933, using the exercise price of $0.01.

(6) Includes shares of common stock issued to one of the selling stockholders pursuant to certain Investor Relations Service Agreements dated as of December 8, 2005 and February 7, 2006 as compensation for investor relations services performed by the selling stockholder under the Agreements.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED JUNE 15, 2006
MATERIAL TECHNOLOGIES, INC.
69,254,266 SHARES OF
COMMON STOCK

This prospectus relates to the resale by the selling stockholder of up to 69,254,266 shares of our common stock, including up to 18,518,519 shares of common stock underlying convertible debentures, up to 50,000,000 issuable upon the exercise of common stock purchase warrants and 735,747 shares of common stock issued to one of the selling stockholders. The convertible debentures are convertible into the number of our shares of common stock equal to the dollar amount of the debentures being converted, divided by the lesser of (i) $0.70, (ii) eighty percent of the average of the three lowest volume weighted average prices during the twenty (20) trading days prior to the conversion or (iii) eighty percent of the volume weighted average price on the trading day prior to the conversion. The warrant is exercisable into 50,000,000 shares of common stock for a period of three years at an exercise price of $0.01 per share, provided that, the exercise price shall be equal to the price at which we sell common stock (through direct stock issuances, and/or conversions or exercises of convertible securities, but not including common stock issued as compensation for services performed on our behalf) during the 30 days prior to the exercise date. The selling stockholder may sell common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. The selling stockholder may be deemed an underwriter of the shares of common stock, which it is offering. We will pay the expenses of registering these shares.

Our common stock is registered under Section 12(g) of the Securities Exchange Act of 1934 and is listed on the Over-The-Counter Bulletin Board under the symbol "MTNA". The last reported sales price per share of our common stock as reported by the Over-The-Counter Bulletin Board on June 7, 2006, was $0.10.

Investing in these securities involves significant risks. See "Risk Factors" beginning on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is _______, 2006.

The information in this Prospectus is not complete and may be changed. This Prospectus is included in the Registration Statement that was filed by Material Technologies, Inc., with the Securities and Exchange Commission. The selling stockholder may not sell these securities until the registration statement becomes effective. This Prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the sale is not permitted.

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PROSPECTUS SUMMARY

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully, including the "risk factors" section, the financial statements and the notes to the financial statements.

MATERIAL TECHNOLOGIES, INC.

We are engaged in research and development of metal fatigue detection, measurement, and monitoring technologies. As such, we are developing several monitoring devices for metal fatigue detection and measurement. We are a development stage company doing business as Tensiodyne Scientific Corporation.

Our efforts are dedicated to developing devices and systems that indicate the true fatigue status of a metal component. We have developed two products. The first is a small, extremely simple device that continuously integrates the effect of fatigue loading in a structural member, called a Fatigue Fuse. The second is an instrument that detects very small cracks in metals, The Electrochemical Fatigue Sensor. It has demonstrated that it can detect cracks, in the laboratory, as small as 10 microns (0.0004 inches), which is smaller than any other practical crack detection technology, as acknowledged by the United States Air Force and confirmed by Rockwell Scientific Corporation. We hold the patents on the Fatigue Fuse and license the technology on the Electrochemical Fatigue Sensor from the University of Pennsylvania.

For the three months ended March 31, 2006 and 2005, we generated revenue in the amount of $28,846 and $18,308, respectively, and a net loss of $3,834,275 and $1,680,065, respectively. For the years ended December 31, 2005 and 2004, we generated revenue in the amount of $139,346 and $146,932, respectively, and a net loss of $20,749,260 and $25,495,291, respectively. As a result of our substantial need for working capital and other factors, our auditors in their report dated January 31, 2006, have expressed substantial doubt about our ability to continue as going concern.

Our principal offices are located at 11661 San Vicente Boulevard, Suite 707, Los Angeles, California 90049 and our telephone number is (310) 208-5589. We are a Delaware corporation.

The Offering	
Common stock offered by selling stockholder	Up to 69,254,266 shares, including up to 18,518,519 shares of common stock underlying convertible debenture in the amount of $1,000,000 and up to 50,000,000 shares issuable upon the exercise of common stock purchase warrants at an exercise price of $0.01 per share, based on current market prices and assuming full conversion of the convertible debenture and the full exercise of the warrants (includes a good faith estimate of the shares underlying convertible debenture and shares underlying warrants). In addition, this prospectus includes 735,747 shares of common stock issued to one of the selling stockholders pursuant to certain Investor Relations Service Agreements dated as of

	December 8, 2005 and February 7, 2006 as compensation for investor relations services performed by the selling stockholder under the Agreements. This number represents 27.69% of our then current outstanding stock.
Common stock to be outstanding after the offering	Up to 318,607,596 shares assuming the full exercise of our warrants and conversion of our convertible debenture.
Use of proceeds	We will not receive any proceeds from the sale of the common stock However, we will receive at least $500,000 upon exercise of the warrants by the selling stockholder. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital purposes.
Over-The-Counter Bulletin Board Symbol	MTNA

The above information regarding common stock to be outstanding after the offering is based on 250,089,077 shares of common stock outstanding as of June 7, 2006 and assumes the subsequent conversion of our issued convertible debenture and exercise of warrants by our selling stockholder.

To obtain funding for our ongoing operations, we entered into a Securities Purchase Agreement with Golden Gate Investors, Inc. ("Golden Gate") on December 16, 2005, as amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement, and that certain Addendum to Convertible Debenture and Warrant to Purchase Common Stock, each dated as of December 16, 2005, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of May 2, 2006 and Securities Purchase Agreement dated as of May 30, 2006, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of June 9, 2006, and as further amended bv that certain Addendum to Warrant to Purchase Common Stock dated as of June 12, 2006, for the sale of (i) $1,000,000 in convertible debentures and (ii) warrants to buy 50,000,000 shares of our common stock. This prospectus relates to the resale of the common stock underlying this convertible debenture and warrants.

On May 2, 2006, we entered into an Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement with Golden Gate pursuant to which we increased the principal amount of the debenture to $1,000,000, provided that previous amounts provided to us by Golden Gate ($75,000) were applied to the purchase price. Upon filing of the registration statement we are required to file registering shares of our common stock underlying the debenture and the warrants, Golden Gate will provide us with $20,000. In addition, within 5 days of the effectiveness of the registration statement, we are required to issue 20,000,000 shares of common stock to be held in escrow and to be released upon conversions of the debenture by Golden Gate. Upon receipt of the 20,000,000 shares, Golden Gate is required to immediately wire to us the remainder of the purchase price ($1,000,000 less the sum of all amounts previously advanced to us).

The debenture bears interest at 5¼%, matures three years from the date of issuance, and is convertible into our common stock, at the selling stockholder's option. The conversion price of the convertible debenture is the lesser of (i) $0.70, (ii) eighty percent of the average of the three lowest volume weighted average prices during the twenty (20) trading days prior to the conversion or (iii) eighty percent of the volume weighted average price on the trading day prior to the conversion. Accordingly, there is in fact no limit on the number of shares into which the debenture may be converted. Golden Gate has agreed that, beginning in the first full calendar month after the registration statement is declared effective, it shall convert at least 10%, but no more than 40%, of the debenture per calendar month, provided that the common stock is available, registered and freely tradable; provided that, we may reduce the monthly maximum conversion from 40% to 6% for any three calendar months during the term of the debenture upon ten business days notice prior to the first day of the applicable calendar month. However, in the event that our volume weighted average price is less than (i) $0.05 or (ii) the lowest price at which any of the 20,000,000 additional shares are issued or sold, the Company shall have the option to do one of the following: (x) redeem that portion of the Debenture that Holder elected to convert, plus any accrued and unpaid interest, at 108% of such amount, or (y) increase the Discount Multiplier to 99% on that portion of the Debenture that Holder elected to convert, or (z) one time during any six month period, not permit any Debenture conversions by Holder for a period of 60 days. If we elect to prepay the debenture, Golden Gate may withdraw its conversion notice. Golden Gate has agreed that, beginning in the first full calendar month after the registration statement is declared effective, it shall exercise 1,250,000 warrants per week until all warrants are exercised. The warrant is exercisable into 50,000,000 shares of common stock at an exercise price of $.01 per share, provided that, the exercise price shall be equal to the price at which we sell common stock (through direct stock issuances, and/or conversions or exercises of convertible securities, but not including common stock issued as compensation for services performed on our behalf) during the 30 days prior to the applicable exercise date.

The selling stockholder has contractually agreed to restrict its ability to convert its debenture or exercise its warrants and receive shares of our common stock such that the number of shares of common stock held by them and their affiliates after such conversion or exercise does not exceed 9.99% of the then issued and outstanding shares of common stock.

On December 8, 2005 and February 7, 2006, we entered into Investor Relations Services Agreements with Lynx Consulting ("Lynx"), in which we engaged Lynx as our consultant to provide investor relations services to our company. In accordance with the Investor Relations Services Agreements, Lynx was provided with piggyback registration rights for 735,747 shares of common stock it received as compensation for services performed by Lynx under the Agreements. Accordingly, we are registering 735,747 shares of common stock issued to Lynx pursuant to this prospectus.

See the "Selling Stockholders" and "Risk Factors" sections for a complete description of the convertible debenture.

RISK FACTORS

This investment has a high degree of risk. Before you invest you should carefully consider the risks and uncertainties described below and the other information in this prospectus. If any of the following risks actually occur, our business, operating results and financial condition could be harmed and the value of our stock could go down. This means you could lose all or a part of your investment.

Risks Relating to Our Business:

We have a history of losses which may continue, requiring us to seek additional sources of capital which may not be available, requiring us to curtail or cease operations.

We incurred net losses of $20,749,260 for the year ended December 31, 2005 and $25,495,291 for the year ended December 31, 2004. In addition, we incurred net losses of $3,834,275 for the three months ended March 31, 2006 and $1,680,065 for the three months ended March 31, 2005. Our monthly burn rate is approximately $100,000 per month and, accordingly, we will need to raise approximately $1,200,000 over the next 12 months in order to sustain our current operations. We cannot assure you that we can achieve or sustain profitability on a quarterly or annual basis in the future. If revenues grow more slowly than we anticipate, or if operating expenses exceed our expectations or cannot be adjusted accordingly, we will continue to incur losses. We will continue to incur losses until we are able to market and sell our products. Our possible success is dependent upon the successful development and marketing of our products, as to which there is no assurance. Any future success that we might enjoy will depend upon many factors, including factors out of our control or which cannot be predicted at this time. These factors may include changes in or increased levels of competition, including the entry of additional competitors and increased success by existing competitors, changes in general economic conditions, increases in operating costs, including costs of supplies, personnel and equipment, reduced margins caused by competitive pressures and other factors. These conditions may have a materially adverse effect upon us or may force us to reduce or curtail operations. In addition, we will require additional funds to sustain and expand our sales and marketing activities, particularly if a well-financed competitor emerges. Based on our current funding arrangement with Golden Gate, upon the effectiveness of this prospectus, which will require Golden Gate to fund the balance of the debenture, we do not anticipate that we will require additional funds to continue our operations for the next 6 months. In the event that our financing arrangement with Golden Gate is terminated or if we need additional financing, there can be no assurance that financing will be available in amounts or on terms acceptable to us, if at all. The inability to obtain sufficient funds from operations or external sources would require us to curtail or cease operations. Any additional equity financing may involve substantial dilution to our then existing shareholders.

Our Independent Registered Public Accounting Firm have expressed substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.

In their report dated January 31, 2006, our independent registered public accounting firm stated that our financial statements for the year ended December 31, 2005 were prepared assuming that we would continue as a going concern. Our ability to continue as a going concern is an issue raised as a result of cash flow constraint, an accumulated deficit of $60,783,746 at December 31, 2005 and recurring losses from operations. We continue to experience net losses. Our ability to continue as a going concern is subject to our ability to generate a profit and/or obtain necessary funding from outside sources, including obtaining additional funding from the sale of our securities, increasing sales or obtaining loans and grants from various financial institutions where possible. Our continued net losses and stockholders' deficit increases the difficulty in meeting such goals and there can be no assurances that such methods will prove successful.

Our products are in the final development stage and there can be no assurance that we will ever bring any of our products into the commercial marketplace.

Our products are in the final development stage. Unexpected problems, technological or specifications changes: (i) may make our technologies obsolete; (ii) may affect our products' overall feasibility; or (iii) may delay completion and increase costs of development and testing. The time required to bring our products to market is uncertain. Market acceptance of our products cannot be determined until product development is complete. There can be no assurance that we will ever bring any of our products into the commercial marketplace.

Since our products are not yet distributed to a commercial market, we do not have a sales force or distribution network to bring our products to market and it may be difficult for us to establish a sales and distribution network in the future.

Since our products are in the development our future operating results will depend on our ability to market our products. We have not yet established a direct sales force or distribution network. Failure to put into place an experienced and skillful marketing infrastructure, in a timely manner, could have a materially adverse impact upon our ability to bring our products to market and continue operating.

We have generated revenues to date from our government and research contracts. We cannot give any assurances that we will be able to generate any significant revenues from our products if and when they become commercialized, nor can we provide assurances that our contract revenue will continue to any extent.

Our revenue generated to date has been limited to revenue received from our government and research contracts. We have not yet developed our products for distribution or sale to multiple customers. Our operating results will depend on our ability to increase and replace our sources of contract revenue through product sales and to market our products to a variety of potential customers rather than relying in large measure on contract revenues. We cannot give any assurances that we will be able to generate any significant revenues from our products if and when they become commercialized, nor can we provide assurances that our contract revenue will continue to any extent.

We currently have a limited number of employees to develop and market our products.

We currently only have four employees, Robert M. Bernstein, president, a part-time engineer, a part-time vice president and a secretary. There is a substantial risk that we may not have funds to hire additional employees that may be needed to complete the development and marketing of our products. Without the ability to market products we have developed, our business and financial condition will be materially adversely affected.

We rely heavily on our President and CEO, management consultants and outside advisors. Our business and prospects may be adversely affected if we are unable to retain the services of our President and CEO, and our consultants and advisors.

Our success largely depends on the performance of our president and chief executive officer, Robert M. Bernstein, and the various independent consultants, and advisors we rely on for consulting services. Our consultants provide us with technological advice and guidance, product development expertise and financial advice and services. During the fiscal year ended December 31, 2005 and the three months ended March 31, 2006, we issued 3,440,435 and 14,526,000 shares of our common stock, respectively, valued at $3,405,507 and $1,779,400, respectively, to compensate these consultants for their services since we are unable to compensate them in any other manner. Loss of these consultants or our inability to continue compensating these consultants by issuing shares of our common stock to them could seriously impair our ability to develop and market our products. Moreover, failure to attract and retain key consultants, advisors, and employees with necessary skills could have a materially adverse impact on our ability to bring our products to market and continue operating. We believe that additional dilution to existing shareholders will occur in the future since we plan to continue to issue our common stock to our officers and consultants as compensation for their services.

Our products and technologies may not be as competitive as other fatigue measuring processes that have been in use for up to 40 years and offer advantages of being accepted in the marketplace.

The metal fatigue measuring industry has significant competition. Other technologies exist which indicate the presence of metal fatigue damage. Single cracks larger than a certain minimum size can be found by non-destructive inspection methods such as dye penetrant, radiography, eddy current, acoustic emission, and ultrasonics. Tracking of load and strain history, for subsequent estimation of fatigue damage by computer processing, is possible with recording instruments such as strain gauges and counting accelerometers. These methods have been in use for up to 40 years and offer the advantage that they have been accepted in the marketplace, whereas our products will remain largely unproven for some currently indeterminable time. Other companies with greater financial and technical resources and larger marketing organizations than ours pose a potential threat if they commence competing in our market segment. We are unaware of any other companies developing technology similar to our technology and our patents protect our unique technologies. On the other hand, companies marketing alternative technologies addressing the same market needs as our products, include Magnaflux Corporation, Kraut-Kremer-Branson, Dunegan-Endevco, and MicroMeasurements. These companies have more substantial assets, greater experience, more human and other resources than ours, including but not limited to established distribution channels and an established customer base.

Our patents covering our fatigue fuse products and technologies have been encumbered as security to certain of our lenders. We may lose our patent protection, as we have defaulted on one of our lending commitments.

We hold patents on our fatigue fuse technology. Our patents are encumbered by certain liabilities as described under the heading of this prospectus, "Business." A first priority security interest in our patents is held by one of our lenders and a shareholder. If we fail to pay obligations to our lenders when they become due that are secured by a pledge of our patents, including the debt obligation, we may lose the interests in our patents, resulting in a loss of patent protection covering our technologies and products, or certain rights to exploit our technology. Presently, we are in default on the debt obligations we owe, but the shareholder has not taken any action as a result of our default.

No assurances can be given that we will not be in default on some or all of our other debt obligations in the future, which could then result in loss of our patents and our patent protection. No assurances can be given that the shareholder that is holding the note that we are in default on will not seek to foreclose on his interest held in our patents as collateral for his loan.

We cannot be certain that our proprietary rights in our products and technologies are adequately protected from infringement by competitors or other third parties.

We rely on a combination of patent and trade secret protection, non-disclosure agreements, licensing arrangements and new patent filings to establish and protect our proprietary rights. We have in the past and intend in the future to file applications as appropriate for patents covering our products. Due to the increasing number of patent applications filed with the United States Patent and Trademark Office, we are uncertain as to if or when patents will issue from any of our pending applications or, if patents do issue, that claims allowed will be sufficiently broad to protect our technology and products. In addition, there is a possibility that any patents that may be issued could be challenged, invalidated or circumvented, or that the rights granted to us as owners of the patents will not provide proprietary protection to us. Since U.S. patent applications are maintained in secrecy until patents issue, and since publication of inventions in the technical or patent literature tend to lag behind such inventions by several months, there is a possibility that we may not be the first creator of inventions covered by such patents or pending patent applications or that we may not be the first to file patent applications for such inventions. Despite our efforts to safeguard and maintain our proprietary rights, we are uncertain as to whether we will be successful in doing so or that our competitors will not independently develop or patent technologies that are substantially equivalent or superior to our technologies.

Since the technologies we have developed for our products are subject to rapid technological changes, we may need to make significant capital investments in newer technologies and equipment.

The technologies we expect to use in our manufacturing and marketing of our products are subject to rapid technological change and could cause us to make significant capital investment in new technologies and equipment. Our market is characterized by rapid technological changes. Newer technologies, techniques or products for determining metal fatigue could be developed with better performance and results than our products. Developing new technologies for manufacture is frequently subject to unforeseen expenses, difficulties, and complications and, in some cases, such development cannot be accomplished. The availability of new and better metal fatigue testing technologies or other products could require us to make significant investments in technology, render our current technology obsolete and have a significant negative impact on our business and results of operations.

If we do not obtain additional financing to continue our development activities, we will not be able to complete our product development.

If we fail to raise additional funds necessary for development from either government grants, sales of securities, borrowings, or other sources, we will not have a product for a potential market and shareholders will have no possibility of any financial return or economic benefit from their ownership of our shares. We are likely to have negative cash flow through at least 6 months, although we have sufficient cash to continue our development efforts for the next 6 months. Over the next 12 months, we anticipate that approximately $3,000,000 will be required to complete development of our products and market them. Even if the necessary $3,000,000 is raised and development is completed, no assurance can be given that the results will establish that our products will be marketable. Moreover, no assurance can be given that our products can be produced at a cost that will make it possible to market them at a commercially feasible price.

Our royalty and license agreements will also reduce our revenue generated from our future products sales.

In order to finance development of the Fatigue Fuse and Electrochemical Sensor, our corporate predecessors sold substantial royalty rights to the Advanced Technology Center, which is affiliated with the University of Pennsylvania. As of the date of this prospectus, we are obligated to pay royalties totaling 12% of revenues from sales of our Fatigue Fuse and 10% of revenues from sales of EFS. If these products are manufactured and sold, these royalty obligations will reduce our revenue from the sale of these products.

Risks Relating to Our Current Financing Arrangement:

There are a large number of shares underlying our convertible debenture, and warrants that may be available for future sale and the sale of these shares may depress the market price of our common stock.

As of June 7, 2006, we had 250,089,077 and 600,000 shares of Class A and Class B common stock issued and outstanding, respectively, and a convertible debenture outstanding that may be converted into an estimated 12,345,679 shares of common stock at current market prices, and outstanding warrants to purchase 50,000,000 shares of Class A common stock. In addition, the number of shares of Class A common stock issuable upon conversion of the outstanding convertible debenture may increase if the market price of our stock declines. All of the shares, including all of the shares issuable upon conversion of the debenture and upon exercise of our warrants, may be sold without restriction. The sale of these shares may adversely affect the market price of our common stock.

The continuously adjustable conversion price feature of our convertible debenture could require us to issue a substantially greater number of shares, which will cause dilution to our existing stockholders.

Our obligation to issue shares upon conversion of our convertible debenture is essentially limitless. The following is an example of the amount of shares of our common stock that are issuable, upon conversion of our

convertible debenture (excluding accrued interest), based on market prices 25%, 50% and 75% below the market price, as of June 7, 2006 of $0.10.

% Below Market	Price Per Share	Effective Conversion Price	Number of Shares Issuable	% of Outstanding Stock
25%	$.075	$.06	16,666,667	6.25%
50%	$.050	$.04	25,000,000	9.09%
75%	$.025	$.02	50,000,000	16.66%

As illustrated, the number of shares of common stock issuable upon conversion of our convertible debenture will increase if the market price of our stock declines, which will cause dilution to our existing stockholders.

The continuously adjustable conversion price feature of our convertible debenture may encourage investors to make short sales in our common stock, which could have a depressive effect on the price of our common stock.

Golden Gate is contractually required to exercise its warrants on a concurrent basis. The issuance of shares in connection with the exercise of the warrants and conversion of the convertible debenture results in the issuance of shares at an effective 20% discount to the trading price of the common stock prior to the conversion. The significant downward pressure on the price of the common stock as the selling stockholder converts and sells material amounts of common stock could encourage short sales by investors. This could place further downward pressure on the price of the common stock. The selling stockholder could sell common stock into the market in anticipation of covering the short sale by converting their securities, which could cause the further downward pressure on the stock price. In addition, not only the sale of shares issued upon conversion or exercise of debenture, warrants and options, but also the mere perception that these sales could occur, may adversely affect the market price of the common stock.

The issuance of shares upon conversion of the convertible debenture and exercise of outstanding warrants may cause immediate and substantial dilution to our existing stockholders.

The issuance of shares upon conversion of the convertible debenture and exercise of warrants may result in substantial dilution to the interests of other stockholders since the selling stockholder may ultimately convert and sell the full amount issuable on conversion. Although the selling stockholder may not convert its convertible debenture and/or exercise their warrants if such conversion or exercise would cause them to own more than 9.9% of our outstanding common stock, this restriction does not prevent the selling stockholder from converting and/or exercising some of their holdings and then converting the rest of their holdings. In this way, the selling stockholder could sell more than this limit while never holding more than this limit. There is no upper limit on the number of shares that may be issued which will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering.

If we are unable to issue shares of common stock upon conversion of the convertible debenture for any reason, we are required to pay penalties to Golden Gate, redeem the convertible debenture at 108% and/or compensate Golden Gate for any buy-in that it is required to make.

If we are unable to issue shares of common stock upon conversion of the convertible debenture as a result of our inability to increase our authorized shares of common stock or as a result of any other reason, we are required to:

- pay late payments to Golden Gate for late issuance of common stock upon conversion of the convertible debenture, in the amount of $100 per business day after the delivery date for each $10,000 of convertible debenture principal amount being converted or redeemed.

- in the event we are prohibited from issuing common stock, or fail to timely deliver common stock on a delivery date, or upon the occurrence of an event of default, then at the election of Golden Gate, we must pay to Golden Gate a sum of money determined by multiplying up to the outstanding principal amount of the convertible debenture designated by Golden Gate by 108%, together with accrued but unpaid interest thereon

- if ten days after the date we are required to deliver common stock to Golden Gate pursuant to a conversion, Golden Gate purchases (in an open market transaction or otherwise) shares of common stock to deliver in satisfaction of a sale by Golden Gate of the common stock which it anticipated receiving upon such conversion (a "Buy-In"), then we are required to pay in cash to Golden Gate the amount by which its total purchase price (including brokerage commissions, if any) for the shares of common stock so purchased exceeds the aggregate principal and/or interest amount of the convertible debenture for which such conversion was not timely honored, together with interest thereon at a rate of 15% per annum, accruing until such amount and any accrued interest thereon is paid in full.

In the event that we are required to pay penalties to Golden Gate or redeem the convertible debenture held by Golden Gate, we may be required to curtail or cease our operations.

If we are required for any reason to repay our outstanding convertible debenture, we would be required to deplete our working capital, if available, or raise additional funds. our failure to repay the convertible debenture, if required, could result in legal action against us, which could require the sale of substantial assets.

In December 2005, we entered into a Securities Purchase Agreement, as amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement, and that certain Addendum to Convertible Debenture and Warrant to Purchase Common Stock, each dated as of December 16, 2005, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of May 2, 2006 and Securities Purchase Agreement dated as of May 30, 2006, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of June 9, 2006 for the sale of an aggregate of $1,000,000 principal amount of convertible debenture, which are presently outstanding. The convertible debenture is due and payable, with 5¼ % interest, three years from the date of issuance, unless sooner converted into shares of our common stock. In addition, any event of default could require the early repayment of the convertible debenture at a price equal to 108% of the amount due under the debenture. We anticipate that the full amount of the convertible debenture, together with accrued interest, will be converted into shares of our common stock, in accordance with the terms of the convertible debenture. If we are required to repay the convertible debenture, we would be required to use our limited working capital and raise additional funds. If we were unable to repay the debenture when required, the debenture holders could commence legal action against us and foreclose on all of our assets to recover the amounts due. Any such action would require us to curtail or cease operations.

Risks Relating to Our Common Stock:

If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board which would limit the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Companies trading on the OTC Bulletin Board, such as us, must be reporting issuers under Section 12 of the Securities Exchange Act of 1934, as amended, and must be current in their reports under Section 13, in order to maintain price quotation privileges on the OTC Bulletin Board. If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board. As a result, the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Our common stock is subject to the "Penny Stock" rules of the SEC and the trading market in our securities is limited, which makes transactions in our stock cumbersome and may reduce the value of an investment in our stock.

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by the selling stockholder. We will not receive any proceeds from the sale of shares of common stock in this offering. However, we will receive the sale price of any common stock we sell to the selling stockholder upon exercise of the warrants in the amount of at least $500,000. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital purposes.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is quoted on the OTC Bulletin Board under the symbol "MTNA". For the periods indicated, the following table sets forth the high and low bid prices per share of common stock. These prices represent inter-dealer quotations without retail markup, markdown, or commission and may not necessarily represent actual transactions.

	High Bid Price	Low Bid Price
First Quarter 2003	$0.024 *	$0.006 *
Second Quarter 2003	$0.016 *	$0.008 *
Third Quarter 2003	$1.90 **	$0.003 **
Fourth Quarter 2003	$2.75 **	$1.90 **
First Quarter 2004	$3.15 **	$2.70 **
Second Quarter 2004	$3.55 **	$3.15 **
Third Quarter 2004	$3.45 **	$3.02 **
Fourth Quarter 2004	$3.05 **	$1.75 **
First Quarter 2005	$2.25 **	$1.30 **
Second Quarter 2005	$1.65 **	$1.00 **
Third Quarter 2005	$2.48 **	$1.05 **
Fourth Quarter 2005	$1.80 **	$0.20 **
First Quarter 2006	$0.25**	$0.08**
Second Quarter 2006***	$0.31**	$0.10**

* Price prior to September 23, 2003 1000:1 reverse stock split.
** Price after September 23, 2003 1000:1 reverse stock split.
***Through June 9, 2006.

HOLDERS

As of June 7, 2006, we had approximately 1,602 holders of our Class A common stock and 1 holder of our Class B common stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock is Interwest Transfer Company, Inc., 1981 East 4800 South, Suite 100, Salt Lake City, Utah 84117.

We have never declared or paid any cash dividends on our common stock. We do not anticipate paying any cash dividends to stockholders in the foreseeable future. In addition, any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements, and such other factors as the Board of Directors deem relevant.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Some of the information in this Form SB-2 contains forward-looking statements that involve substantial risks and uncertainties. You can identify these statements by forward-looking words such as "may," "will," "expect," "anticipate," "believe," "estimate" and "continue," or similar words. You should read statements that contain these words carefully because they:

• discuss our future expectations;

• contain projections of our future results of operations or of our financial condition; and

• state other "forward-looking" information.

We believe it is important to communicate our expectations. However, there may be events in the future that we are not able to accurately predict or over which we have no control. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under "Risk Factors," "Business" and elsewhere in this prospectus. See "Risk Factors."

Overview

We research and develop technologies that detect and measure metal fatigue. We have developed two products. Our two products are the Fatigue Fuse and Electrochemical Fatigue Sensor. We do not generate any revenue from the sale of our products, and thus we are a development stage company. We do generate revenue from research and development services provided to third parties, primarily one defense contractor, however our revenues are minimal.

Our biggest challenge is funding the continued research and development of our products, and then the marketing of our products, until they generate sufficient revenue to support our operations. We try to keep our overhead low and utilize outside consultants as much as possible in order to reduce expenses, and thus far we have been successful in raising enough capital through loans and the sale of our common stock to fund operations. For the foreseeable future, we will continue to raise capital in this manner.

Results of Operations

Three Months Ended March 31, 2006 Compared to Three Months Ended March 31 2005

Introduction

Our revenues for the first quarter of 2006 were substantially similar to the first quarter of 2005 and the fourth quarter of 2005, and were limited exclusively to our research contracts with Northrop Grumman. Most of our research and development costs in both years are related to the recorded cost of stock issued to third party consultants.

Revenues and Loss from Operations

Our revenue, research and development costs, general and administrative expenses, and loss from operations for the three months ended March 31, 2006, as compared to the three months ended March 31, 2005 and December 31, 2005, are as follows:

	3 Months Ended March 31, 2006	3 Months Ended March 31, 2005	Percentage Change	3 Months Ended December 31, 2005
Revenue	$ 28,846	18,308	58%	$ 82,284
Research and Development Costs	185,152	1,212,182	(85)%	78,253
General & Administrative Expenses	2,523,819	321,562	685%	722,918
Loss from Operations	$ (2,680,125)	(1,515,436)	77%	$ (718,887)

Our revenue for all three quarters shown above came from our research contracts with Northrop Grumman.

During the three month periods ended March 31, 2006 and 2005, we incurred research and development costs of $185,152 and $1,212,182, respectively. Of the $185,152 incurred in 2006, $112,000 was related to the issuance of 975,000 shares of our common stock for services provided by employees. Of the $1,212,182 incurred in 2005, $1,135,000 was related to the issuance of 900,000 shares of our common stock for services provided.

General and administrative expenses were $2,523,819 and $321,562, respectively, for the three month periods ended March 31, 2006 and 2005. The major expenses incurred during the three months ended March 31, 2006 and 2005, and December 31, 2005, were:

	3 Months Ended March 31, 2006	3 Months Ended March 31, 2005	3 Months Ended December 31, 2005
Consulting Services	$ 1,958,498	$ 126,602	$ 505,533
Officer's Salary	48,000	54,000	48,000
Secretarial Salary	15,377	10,574	10,202
Professional Fees	341,230	63,924	98,800
Office Expense	10,444	3,837	13,050
Travel Expenses	20,632	16,226	13,106
Rent	7,044	7,044	7,044
Franchise and Other Taxes	5,813	-	-
Payroll Taxes	8,784	9,491	4,671
Telephone	4,852	7,886	4,340

Of the $1,958,498 incurred for consulting services for the first quarter of 2006, $1,589,000 relates to the issuance of 12,801,000 shares of our common stock. Of the $126,602 incurred for consulting services for the first quarter of 2005, $90,000 relates to the issuance of 75,000 shares of common stock. Of the $505,533 of consulting services for the fourth quarter of 2005, $340,608 relates to the issuance of 688,685 shares of our common stock.

<u>Other Income and Expenses and Net Loss</u>

Our other income and expenses and net loss for the three months ended March 31, 2006 and 2005, as compared to the three months ended December 31, 2005 are as follows:

	3 Months Ended March 31, 2006	3 Months Ended March 31, 2005	Percentage Change	3 Months Ended December 31, 2005
Interest expense	(149,938)	(165,353)	9%	$ (6,062,376)
Realized/unrealized loss on securities	(23)	(3,499)	99%	(1,918,636)
Change in fair value of derivative and warrant liabilities	(930,369)	-	N/A	

Change in fair value of investments derivative liability	(76,911)	-	N/A	(585,735)
Interest income	3,891	5,023	(23)%	3,298
Net loss	$ (3,834,275)	(1,680,065)	128%	$ (9,282,336)

During the three months ended March 31, 2006 and 2005, the increase in other expenses related primarily to the change in derivative liability, which is mostly due to the change in the Company's stock price during the quarter.

During the three months ended December 31, 2005, we incurred interest expense of $6,062,376. Of this amount, $5,917,188 relates to the initial recording of the fair value of the derivative and warrant liabilities, $99,855 represents amortization of the discount on convertible debt and accrued interest on our various obligations of $45,333. Interest income during the quarter was $3,298 of which $1,050 was accrued on amounts due from our president and $2,248 was earned on our investments. We also recorded impairment losses on our Langley investment of $1,918,587 and a derivative value of $585,735 related to our Birchington investment.

Liquidity and Capital Resources

Introduction

During the three months ended March 31, 2006, we did not generate positive cash flow. As a result, we funded our operations through the sale of marketable securities that we obtained in a financing transaction, the sale of our common stock, and loans.

Our cash, investments in marketable securities held for trading, investments in marketable securities available for sale, prepaid services, prepaid expenses and other current assets, total current assets, total assets, total current liabilities, and total liabilities as of March 31, 2006, as compared to March 31, 2005 and December 31, 2005, were as follows:

	March 31, 2006	March 31, 2005	December 31, 2005
Cash	$ 22,695	$ 364,109	$ 47,345
Certificates of deposit	-	200,248	-
Marketable securities - trading	130,392	186,400	302,841
Marketable securities - available-for-sale	174,435	993,534	162,193
Prepaid services	-	-	306,250
Prepaid expenses and other	2,206	-	2,153
Total current assets	329,728	769,368	891,607
Total assets	3,929,185	1,788,508	4,493,227
Total current liabilities	2,160,100	1,179,730	1,930,182
Total liabilities	10,919,135	1,734,364	9,768,555

Cash Requirements

For the three months ended March 31, 2006, our net cash used in operations was $(327,957), compared to $(356,761) for the three months ended March 31, 2005. Negative operating cash flows during the three months ended March 31, 2006, were primarily created by a net loss from operations of $3,834,275, offset by non-cash stock related expenses of $1,952,645, change in fair value of derivative and warrant liabilities of $1,007,280, amortization of discount on convertible debenture of $104,298, and decrease in prepaid expenses and other current assets of $306,197. Because of our need for cash to fund our continuing research and development, we do not have an opinion as to how indicative these results will be of future results.

Negative operating cash flows during the three months ended March 31, 2005, were primarily created by a net loss from operations of $1,680,065, offset by non-cash stock related expenses of $1,225,000, amortization of discount on convertible debenture of $99,854, decrease in accounts payable and accrued expenses of $47,338, and accrued interest expense added to principal of $41,986.

Sources and Uses of Cash

Net cash provided by investing activities for the three months ended March 31, 2006 and 2005, were $172,425 and $596,245, respectively. For the three months ended March 31, 2006, the net cash came primarily from the sale of marketable securities in the amount of $174,988, offset by the amount for purchase of securities of $(2,563).

Net cash provided by financing activities for the three months ended March 31, 2006 and 2005, were $130,882 and $1,000, respectively. For the three months ended March 31, 2006, the net cash came primarily from the sale of common stock and warrants in the amount of $164,505, offset by a principal reduction in notes payable of $(25,000) and the purchase of treasury stock of $(8,623).

We are not generating sufficient cash flow from operations to fund growth. We cannot predict when we will begin to generate revenue from the sale of our products, and until that time, we will need to raise additional capital through the sale of our equity securities. If we are unsuccessful in raising the required capital, we may have to curtail operations.

Our financial statements have been prepared assuming we will continue as a going concern. Because we have generated very limited revenues, and have minimal capital resources, our Independent Registered Public Accounting Firm included an explanatory paragraph in their December 31, 2005 report raising substantial doubt about our ability to continue as a going concern.

Year Ended December 31, 2005 Compared to Year Ended December 31, 2004

Introduction

In 2005, our revenues were limited exclusively to our research contracts with Northrop Grumman, and totaled $139,346. In 2004 we generated only $46,932 from our contracts with Northrop Grumman, but also generated $100,000 of our income for the year from research contract with URS Corporation. We continued to fund the majority of our operations through the issuance of our stock, resulting in large expenses in the areas of research and development and consulting. The amount of cash used our operations was relatively consistent at approximately $1.05 million in 2005 and $1.32 million in 2004. We anticipate that we will continue to fund a substantial portion of our operations through the issuance of stock until such time as we can begin to generate revenue from the sale of our products, and we do not have an estimate of when such revenues will begin.

Revenues and Loss from Operations

Our revenue, research and development costs, general and administrative expenses, and loss from operations for the year ended December 31, 2005 as compared to the year ended December 31, 2004 were as follows:

	Year Ended December 31, 2005	Year Ended December 31, 2004	Percentage Change
Revenue	$ 139,346	$ 146,932	(5)%
Research and development costs	2,364,059	7,605,747	(69)%
General and administrative expenses	1,801,928	8,010,423	(78)%
Loss from Operations	$ (4,026,641)	$ (15,469,238)	(74)%

All of our revenues in 2005 came from our research contracts with Northrop Grumman. Of the $146,932 in revenues in 2004, $46,932 came from research contracts with Northrop Grumman, while the balance came from a research contract with URS Corporation.

Of the $2,364,059 in research and development costs for 2005, $2,105,000 was related to the issuance of 1,725,000 shares of our common stock, of which 700,000 shares were issued to Messrs. Goodman and Berks, our officers who are responsible for project development, valued at $840,000. The remaining 1,025,000 shares were issued to other consultants. Of the $7,605,747 in research and development costs for 2004, $7,174,203 was related to the issuance of 3,422,075 shares of our common stock, of which 2,507,500 shares were issued to Messrs. Goodman and Berks, valued at $5,164,000.

General and administrative expenses were $1,801,928 and $8,010,423 for the years ended December 31, 2005 and 2004, respectively. The major expenses incurred during each of the years were as follows:

	Year Ended December 31, 2005	Year Ended December 31, 2004
Consulting services	$ 1,093,606	$ 7,149,240
Officer’s salary	192,000	192,000

Secretarial salary	41,782	61,750
Professional fees	245,153	398,492
Office expense	39,991	35,608
Travel expenses	47,364	49,456
Rent	28,176	28,171
Franchise and other taxes	12,021	9,317
Payroll taxes	22,624	10,670
Telephone	21,274	20,295

Of the $1,093,606 in consulting expense for 2005, $948,159 was related to the issuance of 1,618,685 shares of our common stock. Included in the 1,618,685 shares were 250,000 shares issued for services to be rendered through July 2006 which were valued at $525,000, of which $218,750 was expensed and included in consulting expense. The remaining $306,250 is considered prepaid for services to be rendered in 2006 and is included in current assets on our balance sheet at December 31, 2005. Also included in the 1,618,685 shares were 200,000 shares issued to Joel Freedman, our corporate secretary, valued at $240,000 and 50,000 shares to an employee valued at $54,000.

Of the $7,149,240 in consulting expense for 2004, $6,842,477 was related to the issuance of 3,159,923 shares of our common stock. Included in the 3,159,923 shares was 2,260,000 shares issued to Joel Freedman, valued at $4,972,000.

Other Income and Expenses and Net Loss

Our license modification expense, write-down of marketable securities, realized loss on the sale of marketable securities, unrealized loss on decrease in value of marketable securities, interest expense, interest income, and net loss for the year ended December 31, 2005 as compared to the year ended December 31, 2004 are as follows:

	Year Ended December 31, 2005	Year Ended December 31, 2004	Percentage Change
Modification of research and development agreement	$ (7,738,400)	$ -	100%
Realized/unrealized loss on securities	(1,922,176)	(9,476,920)	(80)%
Change in fair value of investment derivative liability	(585,735)	-	
Interest expense	(6,493,345)	(605,980)	972%
Interest income	17,837	12,497	43%
Net loss	$ (20,749,260)	$ (25,495,291)	(19)%

In 2005, we charged $7,738,400 to operations relating to the issuance of 4,552,000 shares of our common stock to the University of Pennsylvania pursuant to the terms of a workout agreement with them. There was no such workout agreement in 2004.

The realized/unrealized loss on securities relates to the Langley investment. In 2004, the shares experienced a sharp decline, which leveled off in 2005. As a result, the loss recognized to operations was much larger in 2004.

The change in fair value of investments derivative liability relates to our investment in Birchington. This value represents the value of the downside price protection shares that we would be required to sell to Birchington based on the value of our shares as of December 31, 2005. The Birchington transaction was new in 2005.

Of the $6,493,345 in interest expense incurred in 2005, $5,917,188 was related to the fair values of derivative and warrant liabilities related to the GGI Notes and $399,420 pertained to the amortization of the debt discount related to the beneficial conversion feature of the Palisades Debentures. In addition, $45,354 was accrued on the note due the University of Pennsylvania, $127,010 was accrued on the actual outstanding principal balance of the Palisades Debentures, and $4,373 was accrued on our other interest-bearing obligations.

Of the $605,980 in interest expense incurred in 2004, $122,827 was accrued on the note due to the University of Pennsylvania, $93,119 was accrued on the actual outstanding principal balance of the convertible debenture, $326,161 pertains to the amortized portion of the discount attributed to the conversion feature of the debenture, and $59,500 was paid to the holder of a past due note as additional consideration. The $59,500 was paid through the issuance of 25,000 shares of our common stock.

Critical Accounting Policies

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. In consultation with our Board of Directors, we have identified four accounting policies that we believe are key to an understanding of our financial statements. These are important accounting policies that require management's most difficult, subjective judgments.

The first critical accounting policy relates to revenue recognition. Income from our research is recognized at the time services are rendered and billed for.

The second critical accounting policy relates to research and development expense. Costs incurred in the development of our products are expensed as incurred.

The third critical accounting policy relates to the valuation of non-monetary consideration issued for services rendered. We value all services rendered in exchange for our common stock at the quoted price of the shares issued at date of issuance or at the fair value of the services rendered, which ever is more readily determinable. All other services provided in exchange for other non-monetary consideration is valued at either the fair value of the services received or the fair value of the consideration relinquished, whichever is more readily determinable.

Our accounting policy for equity instruments issued to consultants and vendors in exchange for goods and services follows the provisions of EITF 96-18, " *Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services* " and EITF 00-18, " *Accounting Recognition for Certain Transactions Involving Equity Instruments Granted to Other Than Employees* ." The measurement date for the fair value of the equity instruments issued is determined at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement. In accordance to EITF 00-18, an asset acquired in exchange for the issuance of fully vested, nonforfeitable equity instruments should not be presented or classified as an offset to equity on the grantor's balance sheet once the equity instrument is granted for accounting purposes. Accordingly, we record the fair value of nonforfeitable common stock issued for future consulting services as prepaid services in our consolidated balance sheet.

The fourth critical accounting policy is our accounting for conventional convertible debt. When the convertible feature of the conventional convertible debt provides for a rate of conversion that is below market value, this feature is characterized as a beneficial conversion feature ("BCF"). A BCF is recorded by us as a debt discount pursuant to EITF Issue No. 98-5 ("EITF 98-05"), " *Accounting for Convertible Securities with Beneficial Conversion Features or Contingency Adjustable Conversion Ratio,"* and EITF Issue No. 00-27, " *Application of EITF Issue No. 98-5 to Certain Convertible Instruments* ." In those circumstances, the convertible debt will be record net of the discount related to the BCF. We amortize the discount to interest expense over the life of the debt using the effective interest method.

The fifth critical account policy relates to the accounting for non-conventional convertible debt and the related stock purchase warrants. In the case of non-conventional convertible debt, we bifurcate our embedded derivative instruments and records them under the provisions of SFAS No. 133, " *Accounting for Derivative Instruments and Hedging* Activities," as amended, and EITF Issue No. 00-19, " *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock.* " These embedded derivatives include the conversion feature, liquidated damages related to registration rights and default provisions. The accounting treatment of derivative financial instruments requires that we record the derivatives and related warrants at their fair values as of the inception date of the agreement and at fair value as of each subsequent balance sheet date. In addition, under the provisions of EITF Issue No. 00-19, as a result of entering into the non-conventional convertible debenture, we are required to value and classify all other non-employee stock options and warrants as derivative liabilities at that date and mark them to market at each reporting date thereafter. Any change in fair value will be recorded as non-operating, non-cash income or expense at each reporting date. If the fair value of the derivatives is higher at the subsequent balance sheet date, we will record a non-operating, non-cash charge. If the fair value of the derivatives is lower at the subsequent balance sheet date, we will record non-operating, non-cash income. We value our derivatives primarily using the Black-Scholes Option Pricing Model. The derivatives are classified as long-term liabilities.

The sixth critical accounting policy relates to the recording of marketable securities held for trading and available-for-sale. Marketable securities purchased with the intent of selling them in the near term are classified as

trading securities. Trading securities are initially recorded at cost and are adjusted to their fair value, with the change in fair value during the period included in earnings as unrealized gains or losses. Realized gains or losses on dispositions are based upon the net proceeds and the adjusted book value of the securities sold, using the specific identification method, and are recorded as realized gains or losses in the consolidated statements of operations. Marketable securities that are not classified as trading securities are classified as available-for-sale securities. Available-for-sale securities are initially recorded at cost. Available-for-sale securities with quoted market prices are adjusted to their fair value, subject to an impairment analysis (see below). Any change in fair value during the period is excluded from earnings and recorded, net of tax, as a component of accumulated other comprehensive income (loss). Any decline in value of available-for-sale securities below cost that is considered to be "other than temporary" is recorded as a reduction of the cost basis of the security and is included in the statement of operations as a write down of the market value (see below).

The seventh critical accounting policy is our accounting for the fair market value of non-marketable securities we have acquired. Non-marketable securities are originally recorded at cost. In the case of non-marketable securities we acquired with our common stock, we value the securities at a significant discount to the stated per share cost based upon our historical experience with similar transactions as to the amount ultimately realized from the sale of the shares. Such investments are reduced when we have indications that a permanent decline in value has occurred. At such time as quoted market prices become available, the net cost basis of these securities will be reclassified to the appropriate category of marketable securities. Until that time, the securities will be recorded at their net cost basis, subject to an impairment analysis (see below).

In accordance with the guidance of EITF 03-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments," we assess any decline in value of available-for-sale securities and non-marketable securities below cost as to whether such decline is "other than temporary." If a decline is determined to be "other than temporary," the decline is recorded as a reduction of the cost basis of the security and is included in the statement of operations as an impairment write down of the investment.

BUSINESS

Introduction

We are engaged in research and development of metal fatigue detection, measurement, and monitoring technologies. As such, we are developing several monitoring devices for metal fatigue detection and measurement. We are a development stage company doing business as Tensiodyne Scientific Corporation.

Our efforts are dedicated to developing devices and systems that indicate the true fatigue status of a metal component. We have developed two products. The first is a small, extremely simple device that continuously integrates the effect of fatigue loading in a structural member, called a Fatigue Fuse. The second is an instrument that detects very small cracks in metals, the Electrochemical Fatigue Sensor. It has demonstrated that it can detect cracks, in the laboratory, as small as 10 microns (0.0004 inches), which is smaller than any other practical crack detection technology, as acknowledged by the United States Air Force and confirmed by Rockwell Scientific Corporation. We hold the patents on the Fatigue Fuse and license the technology on the Electrochemical Fatigue Sensor from the University of Pennsylvania.

We were formed as a Delaware corporation on March 4, 1997. We are the successor to the business of Material Technology, Inc., a Delaware corporation, also doing business as Tensiodyne Scientific, Inc. Material Technology, Inc. was the successor to the business of Tensiodyne Corporation that began developing the Fatigue Fuse in 1983. Our two predecessors, Tensiodyne Corporation and Material Technology, Inc. were engaged in developing and testing the Fatigue Fuse and, beginning in 1993, developing the Electrochemical Fatigue Sensor.

As of December 31, 2005, our investments in our subsidiary companies represented less than 10% of our total assets. We have controlling interests in each of our subsidiary companies and members of our management also serve as officers and directors of each subsidiary.

Our Technologies

<u>The Fatigue Fuse</u>

The Fatigue Fuse is designed to be affixed to a structure to give warnings as pre-selected portions of the fatigue life have been used up (i.e., how far to failure the structure has progressed). It warns against a condition of widespread generalized cracking due to fatigue.

The Fatigue Fuse is a thin piece of metal similar to the material being monitored. It consists of a series of parallel metal strips connected to a common base, much as fingers are attached to a hand. Each "finger" has a different geometric pattern, called "notches," defining its boundaries. Each finger incorporates an application-specific notch near the base. By applying the laws of physics to determine the geometric contour of each notch, the fatigue life of each finger is finite and predictable. When the fatigue life of a finger (Fuse) is reached, the Fuse breaks.

By implementing different geometry for each finger in the array, different increments of fatigue life are observable. Typically, notches will be designed to facilitate observing increments of fatigue life of 10% to 20%. By mechanically attaching or bonding these devices to different areas of the structural member of concern, the Fuse undergoes the same fatigue history (strain cycles) as the structural member. Therefore, breakage of a Fuse indicates that an increment of fatigue life has been reached for the structural member. The notch and the size and shape of the notch concentrate energy on each finger. The Fuse is intimately attached to the structural member of interest. Therefore, the Fuse experiences the same strain and wear history as the member. Methods are available for remote indication of Fuse fracturing.

In a new structure, we generally assume there is no fatigue and can thus design the Fatigue Fuse for 100% of its life potential. But in an existing structure, one that has experienced loading and wear, we must determine the fatigue status of that structural member so we can design the Fatigue Fuse to monitor the remaining fatigue life potential.

We believe that the Fatigue Fuse is of value in monitoring aircraft, ships, bridges, conveyor systems, mining equipment, cranes, etc. No special training is needed to qualify individuals to report any broken segments of the Fatigue Fuse to the appropriate engineering authority for necessary action. The success of the device is contingent upon our successful marketing of the Fatigue Fuse, and no assurance can be given that we will be able to overcome the obstacles relating to introducing a new product to the market. To implement our ability to produce and market the Fatigue Fuse, we need substantial additional capital and no assurance can be given that this needed capital will be available.

The Electrochemical Fatigue Sensor ("EFS")

The EFS is a device that employs the principle of electrochemical/mechanical interaction to find cracks. It is an instrument that detects very small cracks and has the potential to determine crack growth rates. The Electrochemical Fatigue Sensor has demonstrated in the laboratory that it can detect cracks as small as 10 microns (0.0004 inches), which is smaller than any other practical technology, as acknowledged by the United States Air Force and Rockwell Scientific Corporation. We believe that nothing comparable to this instrument currently exists in materials technology.

The EFS functions by treating the location of interest (the target) associated with the structural member as an electrode of an electrochemical cell. By imposing a constant voltage-equivalent circuit as the control mechanism for the electrochemical reaction at the target surface, current flows as a function of stress action. The EFS is always a dynamic process; therefore stress action is required, e.g. to measure a bridge structural member it is necessary that cyclic loads be imposed, as normal traffic on the bridge would do. The results are a specific set of current waveforms and amplitudes that characterize and indicate fatigue damage i.e., fatigue cracks.

Development of our Technologies

Currently, our primary focus is on the development and commercialization of the EFS. Due to our limited resources, efforts in the development and testing of the Fatigue Fuse have been delayed.

Status of the Fatigue Fuse

The development and application sequence for the Fatigue Fuse and EFS is (a) basic research, (b) exploratory development, (c) advanced development, (d) prototype evaluation, (e) application demonstration, and (f) commercial sales and service. The Fatigue Fuse came first. The inventor, Professor Maurice Brull, conducted the basic research at the University of Pennsylvania. We conducted the advanced development, including variations of the adhesive bonding process, and fabricating a laboratory-grade remote recorder for finger separation events that constitute proper functioning of the Fatigue Fuse. The next step, prototype evaluation, encompasses empirical tailoring of Fatigue Fuse parameters to fit the actual spectrum loading expected in specific applications, and needs to be done. The tests associated with further development of the Fatigue Fuse include full-scale structural tests with attached Fatigue Fuses. A prototype of the Fatigue Fuse has been designed, fabricated, and successfully demonstrated. The next tasks will be to prepare an analysis for more efficient selection of Fatigue Fuse parameters and to conduct a comprehensive test program to prove the ability of the Fatigue Fuse to accurately indicate fatigue damage when subjected to realistically large variations in measuring stresses and strains in fatiguing metal. The final tasks prior to marketing will be an even larger group of demonstration tests.

The Fatigue Fuse is at its final stages of testing and development. To begin marketing the Fatigue Fuse, it is our belief that it will take from six to 12 months and cost approximately $600,000, including technical and beta testing and final development. If testing, development, and marketing are successful, we estimate we should begin receiving revenue from the sale of the Fatigue Fuse within a year of completing development. However, we cannot estimate the amount of revenue that may be realized from sales of the Fuse, if any.

To date, certain organizations have included our Fatigue Fuse in test programs. We have already completed the tests for welded steel civil bridge members conducted at the University of Rhode Island. In 1996, Westland Helicopter, a British firm, tested the Fatigue Fuse on helicopters. That test was successful with the legs of the Fatigue Fuses failing in sequence as predicted.

The Fatigue Fuse has been at this stage for the past several years as we have not had the necessary financial resources to finalize our development and commence marketing. At the present time we have elected to defer future development of the Fatigue Fuse and apply our resources to pursue the EFS technology.

Status of the EFS

The existence of very small cracks can be determined by EFS, and in this regard it appears superior in resolution to other current non-destructive testing techniques. It has succeeded in regularly detecting cracks as small as 40 microns in a titanium alloy, in a laboratory environment, as verified by a scanning electronic microscope, and has proven to be capable of detecting cracks down to ten microns, as acknowledged by the Materials Laboratory at Wright Patterson Air Force on a titanium alloy and confirmed by evaluations at Rockwell Scientific Corporation on bridge grade steel. This is much smaller than the capability of any other practical non-destructive testing method for

structural components. There is also a vast body of testing supporting successful use of this technology with selected aluminum alloys. Within the past twelve months, we have successfully evaluated EFS on six highway bridges. These are considered Beta Tests verifying the procedure in the real world. We are now preparing to begin the marketing of the EFS for bridges.

Commercial Markets for our Products and Technologies

No commercial application of our products has been arranged to date, but we believe it can be applied to certain markets. Our technology is applicable to many market sectors such as bridges and aerospace as well as ships, cranes, railways, power plants, nuclear facilities, chemical plants, mining equipment, piping systems, and heavy iron.

Application Of Our Technologies For Bridges

Our EFS and Fatigue Fuse products primarily address the detection of fatigue in structures such as bridges. In the United States alone there are more than 610,000 bridges of which over 260,000 are rated by the Federal Highway Administration as requiring major repair, rehabilitation, or replacement. Our EFS and Fatigue Fuse products can be effectively used as fatigue detection devices for all metal bridges located within the United States. Our detection devices also address maintenance problems associated with bridge structures.

Although there are normal business imperatives, the bridge market is essentially macro-economically and government policy driven. In our opinion, only technology can provide the solution. The need for increased spending accelerates significantly each year as infrastructure ages. The Federal government has recently mandated bridge repair and detection through the passage of the Intermodal Surface Transportation and Efficiency Act in 1991 and again in the $200 billion, 1998 Transportation Equity Act. We do not currently have contracts in place to install our fatigue detection products on bridge structures within the United States.

Our Patent Protections

We are the assignee of four patents originally issued to Tensiodyne Corporation. The first was issued on May 27, 1986, and expired on May 27, 2003. It is titled "Device for Monitoring Fatigue Life" and bears United States Patent Office Number 4,590,804. The second patent, titled "Metal Fatigue Detector" was issued on August 24, 1993 and expires on August 24, 2010, United States Patent Number 5,237,875. The third patent, titled "Device for Monitoring the Fatigue Life of a Structural Member and a Method of Making Same," was issued on June 14, 1994 and expires on June 14, 2011, United States Patent Number 5,319,982. In addition, we own a fourth patent, titled "Device for Monitoring the Fatigue Life of a Structural Member and a Method of Making Same," which was issued June 20, 1995, United States Patent Number 5,425,274, and expires June 20, 2012.

Our Patents are Encumbered

The patents described in the preceding section are pledged as collateral to secure the repayment of loans extended to us or indebtedness that we currently owe. On August 30, 1986, we entered into a funding agreement with the Advanced Technology Center, whereby ATC paid $45,000 to us for the purchase of a royalty of 3% of future gross sales and 6% of sublicensing revenue. The royalty is limited to the $45,000 plus an 11% annual rate of return. At December 31, 2005, the future royalty commitment was limited to approximately $344,000. The payment of future royalties is secured by equipment we use in the development of technology as specified in the funding agreement, however, no lien against our equipment or our patents in favor of ATC vests until we generate royalties from product sales.

On May 4, 1987, we entered into a funding agreement with ATC whereby ATC provided $63,775 to us for the purchase of a royalty of 3% of future gross sales and 6% of sublicensing revenue. The agreement was amended August 28, 1987, and as amended, the royalty cannot exceed the lesser of (1) the amount of the advance plus a 26% annual rate of return or, (2) total royalties earned for a term of 17 years. As with our first agreement with ATC, no lien or encumbrance against our assets, including our patents, vests in favor of ATC until we generate royalties from product sales. If we were to default on these payments to ATC, our obligations relating to these agreements then become secured by our patents, products and accounts receivable. At December 31, 2005, the total future royalty commitments, including the accumulated 26% annual rate of return, were limited to approximately $6,142,000.

On May 27, 1994, we borrowed $25,000 from Sherman Baker, one of our shareholders. We gave Mr. Baker a promissory note due May 31, 2002 and we pledged our patents as collateral to secure the repayment of this note. As of the date of this prospectus, there is a first priority security interest in our patents as collateral for the repayment of the amounts we owe to Mr. Baker. As additional consideration for this loan, we granted to Mr. Baker a 1% royalty interest in the Fatigue Fuse and a 0.5% royalty interest in the Electrochemical Fatigue Sensor. We are in default of the repayment terms of the note held by Mr. Baker, and at December 31, 2005, we owe Mr. Baker $53,515 in principal and accrued interest. Mr. Baker has not taken any action to foreclose his interest in the collateral and we are in discussions with Mr. Baker, with the expectation that we will cure any default in the note he holds and avoid any foreclosure of his security interest held in our patents. We believe that although we have not yet cured our defaults on the loans to Mr. Baker, our current communications with him suggest that Mr. Baker does not have the present intention of foreclosing on the patents as collateral or the pursuit of legal action against us to collect the balance due under our note.

Distribution of our Products

Subject to available financing, we intend to exhibit the Fatigue Fuse and the Electrochemical Fatigue Sensor at various trade shows and intend to also market our products directly to end users including certain state regulatory agencies charged with overseeing bridge maintenance, companies engaged in manufacturing and maintaining large ships and tankers, and the military. Although we intend to undertake marketing, dependent on the availability of funds, within and without the United States, no assurance can be given that any such marketing activities will be

implemented.

Competition

Other technologies exist which measure and indicate fatigue damage. Single cracks larger than a minimum size can be found by nondestructive inspection methods such as dye penetrate, radiography, eddy current, acoustic emission, and ultrasonics. Tracking of load and strain history, to subsequently estimate fatigue damage by computer processing, is possible with recording instruments such as strain gauges and counting accelerometers. These methods have been used for 40 years and also offer the advantage of having been accepted in the market, whereas our products remain largely unproven. Companies marketing these alternate technologies include Magnaflux Corporation, Kraut-Kermer-Branson, Dunegan-Endevco, and Micro Measurements. These companies have more substantial assets, greater experience, and more resources than ours, including, but not limited to, established distribution channels and an established customer base. The familiarity and loyalty to these technologies may be difficult to dislodge. Because we are still in the development stage, we are unable to predict whether our technologies will be successfully developed and commercially attractive in potential markets.

EMPLOYEES

We have four employees, Robert M. Bernstein, President, Chief Executive Officer and Chief Financial Officer, a Secretary, and two part time engineers. In addition, we retain consultants for specialized work.

DESCRIPTION OF PROPERTIES

We lease an office at 11661 San Vicente Blvd., Suite 707, Los Angeles, California, 90049. The space consists of 830 square feet and will be adequate for our current and foreseeable needs. The total rent is payable at $2,348 per month on a month-to-month basis. Either party may cancel the lease on 30 days notice.

LEGAL PROCEEDINGS

On March 8, 2006, Stephen Forrest Beck filed a lawsuit against us and our President, Robert M. Bernstein, in the Superior Court of the State of California, County of Los Angeles, Case No. SC088898, titled Stephen Forrest Beck v. Material Technologies, Inc. and Robert M. Bernstein. Mr. Beck alleges breach of contract and seeks approximately $135,000 in damages, plus the issuance or the value of 3,896,620 shares of our Class A common stock to which he believes he is entitled, plus interest. We have filed an answer and a hearing has been scheduled.

On June 15, 2005, we filed a Complaint in the Los Angeles Superior Court, State of California, case number BC336689, against Gem Advisors, Inc., GEM Global Emerging Markets, and Global Emerging Markets of North America, Inc., seeking a declaration regarding certain agreements we entered into with the parties. We did not seek monetary damages. On November 16, 2005, Gem Advisors, Inc. filed an Answer and Cross-Complaint, seeking approximately $1.9 million in damages arising out of finders fees for certain transactions. On November 30, 2005, default judgments were entered against the other defendants who failed to respond to our Complaint. A motion is currently pending to set aside the defaults..We intend to pursue our Complaint and defend the Cross-Complaint vigorously.

In the ordinary course of business, we may be from time to time involved in various pending or threatened legal actions. The litigation process is inherently uncertain and it is possible that the resolution of such matters might have a material adverse effect upon our financial condition and/or results of operations. However, in the opinion of our management, matters currently pending or threatened against us are not expected to have a material adverse effect on our financial position or results of operations.

MANAGEMENT

DIRECTORS AND EXECUTIVE OFFICERS

The following information sets forth the names of our officers and directors, their present positions with us, and their biographical information.

Name	Age	Office
Robert M. Bernstein	71	President, Chief Executive Officer, Chief Financial Officer and Chairman of the Board
Joel R. Freedman	45	Secretary and Director
Dr. John W. Goodman	71	Chief Engineer and Director
Dr. William Berks	75	Vice President and Director

ROBERT M. BERNSTEIN, PRESIDENT/CHIEF FINANCIAL OFFICER/CHAIRMAN OF THE BOARD.

Robert M. Bernstein is 71 years of age. He received a Bachelor of Science degree from the Wharton School of the University of Pennsylvania in 1956. From August 1959 until his certification expired in August 1972, he was a Certified Public Accountant licensed in Pennsylvania. From 1961 to 1981, he was a consultant specializing in mergers, acquisitions, and financing. From 1981 to 1986, Mr. Bernstein was Chairman and Chief Executive Officer of Blue Jay Enterprises, Inc. of Philadelphia, PA, an oil and gas exploration company. In December 1985, he formed a research and development partnership for Tensiodyne, funding approximately $750,000 for research on the Fatigue Fuse. In October 1988 he became Chairman of the Board, President, Chief Financial Officer, and CEO of Matech 1 and retained these positions with the Company after the spin off from Matech 1 on July 31, 1997.

JOEL R. FREEDMAN, SECRETARY/DIRECTOR.

Joel R. Freedman is 45 years of age. From October 1989 until the present, Mr. Freedmen holds the position of Secretary and a Director of the company. Mr. Freedman attends board meetings and provides advice to the Company as needed. From 1983 through 1999, he was president of Genesis Advisors, Inc., an investment advisory firm in Bala Cynwyd, Pennsylvania. From January 1, 2000 through December 2002, he was a Senior Vice President of PMG Capital Corp., a securities brokerage and investment advisory firm in West Conshohocken, Pennsylvania. From December 2002 to present, he is a senior vice-president of Wachovia Securities LLC, a securities brokerage and investment advisory firm in Conshohocken, Pennsylvania. His duties there are a full-time commitment. Accordingly, he does not take part in Matech's daily activities. He is not a director of any other company.

DR. JOHN W. GOODMAN, CHIEF ENGINEER/DIRECTOR.

Dr. John W. Goodman is 71 years of age. He is retired from TRW Space and Electronics and was formerly Chairman of the Aerospace Division of the American Society of Mechanical Engineers. He holds a Doctorate of Philosophy in Materials Science that was awarded with distinction by the University of California at Los Angeles in 1970. In 1957, he received a Masters of Science degree in Engineering Mechanics from Penn State University and in 1955 he received a Bachelor of Science degree in Mechanical Engineering from Rutgers University. From 1972 to 1987, Dr. Goodman was with the U. S. Air Force as lead Structural Engineer for the B-1 aircraft; Chief of the Fracture and Durability Branch, and Materials Group Leader, Structures Department, Aeronautical Systems Center, Wright-Patterson Air Force Base. From 1987 to December 1993, he was on the Senior Staff, Materials Engineering

Department of TRW Space and Electronics. He has been Chief Engineer for Development of Matech's products since May 1993. Over the last four years he has consulted part time for the Company.

DR. WILLIAM BERKS, VICE-PRESIDENT/DIRECTOR

William Berks- Vice-President/Director, age 75. He managed the previous Matech contracts for the development of EFS at the University of Pennsylvania, Southwest Research Institute, and Optim, Inc. Mr. Berks has a B. Aero. E and MS in Applied Mechanics from Polytechnic Institute of New York and MS in Industrial Eng., Stevens Institute of Technology. With Matech since 1997 he has over 30 years' experience in spacecraft mechanical systems engineering. He retired from TRW in November 1992 where he was employed for 26 years in a variety of management positions: Manager of the Mechanical Design Laboratory, the engineering design skill center for the design and development of spacecraft mechanical systems, which had as many as 350 individuals: Manager of the Advanced Systems Design Department, which was responsible for mechanical systems design for all spacecraft project: Assistant Project Manager for Mechanical Subsystems for a major spacecraft program, which included preparation of plans, specifications and drawings, supervision of two major subcontracts, and responsibility for flight hardware fabrication and testing. He holds six patents.

Compliance with Section 16(a) of the Securities Exchange Act.

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, certain officers and persons holding 10% or more of our common stock to file reports regarding their ownership and regarding their acquisitions and dispositions of the Registrant's common stock with the Securities and Exchange Commission ("SEC"). Such persons are required by SEC regulations to furnish our company with copies of all Section 16(a) forms they file.

Based solely upon a review of Forms 3 and 4 and amendments thereto furnished to the registrant under Rule 16a-3(d) during fiscal 2005, and certain written representations from executive officers and directors, we are unaware that any required reports that have not been timely filed.

Code of Ethics

We have not adopted a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have not adopted such a code of ethics because all of management's efforts have been directed to building the business of the company; at a later time, such a code of ethics may be adopted by the board of directors.

Committees of the Board Of Directors

We presently do not have an audit committee, compensation committee, nominating committee, an executive committee of our board of directors, stock plan committee or any other committee of our board of directors.

Since 1987, we and our predecessors have had an Advisory Board consisting of very senior experienced businessmen and technologists, most of whom are nationally prominent. These individuals consult with us on an as needed basis. Members of the Advisory Board serve at will. The Advisory Board advises Matech's management on technical, financial, and business matters and may in the future be additionally compensated for these services. A brief biographical description of the members of the advisory board is as follows:

MARYBETH MICELI. Ms. Miceli is currently Director of Marketing for Sam Schwartz, LLC, Engineering and Planning Consultants, New York, NY, where she also consults on infrastructure management, non-destructive testing, and fatigue testing. Previously she was with Lucius Pitkin, Inc., Engineering Consultants, where her responsibilities included Quality Assurance Manager, and Assistant Radiation Safety Officer. Among her duties was the supervision and performance of failure analysis investigations, fatigue testing investigations, and interfacing with government agencies on testing, regulations, and safety. She was a director of the American Society of Non-destructive Testing, and Chairman in 2003 of the Metro NY Chapter. She is also a member of the American Society of Metals. A graduate of Johns Hopkins University, she has an MS in Materials Science and Engineering, from Virginia Polytechnic Institute. She has published several papers on non-destructive testing of bridge components and other related subjects.

We issued the following shares of common stock to Ms. Miceli as compensation for services performed on our behalf:

• 75,000 shares on December 17, 2004 valued at $135,000;

• 75,000 shares on March 11, 2005 valued at $90,000;

• 125,000 shares on April 26, 2005 valued at $130,000; and

• 475,000 shares on January 9, 2006 valued at $76,000.

BRENT M. PHARES. Dr. Phares has over 15 years of management, inspection, research, and testing experience related to bridge structures. He currently is the Associate Director for Bridges and Structures at Iowa State University. In this position, Dr. Phares is responsible for the development and deployment of innovative bridge evaluation and techniques and for the development of applications for innovative materials in bridge engineering. In the past, Dr. Phares has served as a consulting Research Engineer at the Federal Highway Administration's Nondestructive Evaluation Validation Center where he lead the execution of several validation and developmental studies. More recently, Dr. Phares served as President and CEO of a small engineering firm specializing in the evaluation of civil infrastructure based on innovative sensors and monitoring strategies. He is a registered

professional engineer and serves as a voting member of many national and international technical committees.

On January 9, 2006, we issued Dr. Phares 1,000,000 shares of our common stock as compensation for services performed on our behalf valued at $160,000.

CAMPBELL LAIRD. Campbell Laird, age 64, received his Ph.D. in 1963 from the University of Cambridge. His Ph.D. thesis title was "Studies of High Strain Fatigue." He is presently Professor and graduate group Chairman in the Department of Materials, Science & Engineering at the University of Pennsylvania. His research has focused on the strength, structure, and fatigue of materials, in which areas he published in excess of 250 papers. He is co-inventor of the EFS.

On December 17, 2004, we issued Dr. Laird 100,000 shares of our common stock subject to a two-year lockup agreement and valued at $180,000. Also in 2004 we issued Dr. Laird 260,000 shares subject to a three-year lockup agreement which were valued at $582,400.

SAMUEL I. SCHWARTZ. Samuel I. Schwartz, age 50, is presently President of Sam Schwartz Co., consulting engineers, primarily in the bridge industry. Mr. Schwartz received his BS in Physics from Brooklyn College in 1969, and his Masters in Civil Engineering from the University of Pennsylvania in 1970. From February 1986 to March 1990, was the Chief Engineer/First Deputy Commissioner, New York City Department of Transportation and from April 1990 to the present acted as a director of the Infrastructure Institute at the Cooper Union College, New York City, New York. From April 1990 to 1994 he was a Senior Vice President of Hayden Wegman Consulting Engineers, and is a columnist for the New York Daily News.

NICK SIMIONESCU. Mr. Simionescu joined HNTB in 1974, one of the largest consulting engineering companies in the world, and is currently Vice President, Director of Business Development in the New York City Office. He has over 37 years of management, construction, design, inspection and detailing experience. Mr. Simionescu is very familiar with the New York City infrastructure. For nearly 28 years he has been working in New York City, primarily on projects with the New York City Department of Transportation and New York State Department of Transportation Regions 10 and 11. His projects have included management of the inspections of the Williamsburg, Brooklyn, Triborough, Manhattan, and Queensboro bridges. Additionally, he has been the Project Manager of Bridge Inspection for many other arterial and local bridges throughout New York. Mr. Simionescu's responsibilities with HNTB have involved a variety of National and International projects. He has been the Senior Structural Designer and Manager of bridges in South Carolina (800 ft. span), Rhode Island (366 ft. span), Malaysia (740 ft. span), and Florida (1300 ft. span).

HENRYKA MANES. Ms. Manes is the Founder and President of H. Manes & Associates, a consulting firm that enables environmental and high technology companies to export their products worldwide. She has a wide-range of experience with projects in more than 20 countries in Asia, Africa, Eastern Europe and South America. Prior to founding HMA, Ms. Manes was Director of Operations for the American Jewish Joint Distribution Committee's International Development Program and has worked with the World Bank, United States Agency for International Development, and the United Nations Development Program. Ms. Manes received her B.A. from Macalester College in St. Paul, MN, and did her graduate work at the University of Minnesota, Minneapolis, MN.

Terms of Office

Our directors are appointed for a one year term to hold office until the next annual general meeting of the holders of our Common Stock or until removed from office in accordance with our by-laws. Our officers are appointed by our board of directors and hold office until removed by our board of directors.

EXECUTIVE COMPENSATION

The following tables set forth certain information regarding each of our most highly-compensated executive officers whose total annual salary and bonus for the fiscal year ending December 31, 2005, 2004 and 2003 exceeded $100,000:

Name and Principal Position	Year	Salary ($)	Bonus($)	Other Annual Compen-sation ($)	Restricted Stock Awards ($)	Options (SARs (#)	LTIP Payout($)	All Other Compen- sation ($)
Robert M. Bernstein								
CEO	2005	$ 192,000 (2)	$ --	$ --	$ 0	--	$ --	$ --
	2004	$ 192,000 (1)	--	--	0	--	--	--
	2003	$ 138,000	$ --	$ 19,617 (9)	$ 320,000	--	$ --	$ --
John W. Goodman								
Director and Engineer	2005	$ 41,700	$ --	$ --	$ 240,000 (4)	--	$ --	$ --
	2004	$ 35,250	$ --	$ --	$ 2,760,000 (3)	--	--	--
	2003	$ 18,943	$ --	$ --	$ 10,000 (10)	--	$ --	$ --

William Berks								
Vice-President								
of Government	2005	$ 83,350	$ --	$ --	$ 600,000 (6)	--	$ --	$ --
Projects and	2004	$ 79,500	$ --	$ --	$ 2,404,000 (5)	--	$ --	$ --
Director	2003	$ 71,374	$ --	$ --	$ 30,000 (11)	--	$ --	$ --
Joel Freedman								
Secretary and	2005	$ --	$ --	$ --	$ 240,000 (8)	--	$ --	$ --
Director	2004	$ --	$ --	$ --	$ 4,972,000 (7)	--	$ --	$ --

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(1) Cash compensation actually paid to Mr. Bernstein in 2004 amounted to $316,000 of which $120,000 relates to 2004 with the remaining amount of $196,000 pertained to the payment of prior years accrued compensation. Mr. Bernstein used the net pay received from the cashing of the accrued compensation to reduce the loan balance he owed us by $97,450.

(2) Cash compensation actually paid to Mr. Bernstein in 2005 amounted to $210,446 of which $192,000 relates to 2005 with the remaining amount of $18,446 pertained to the payment of prior years' accrued compensation.

(3) In 2004, we issued Mr. Goodman 1,500,000 shares of our common stock subject to a two-year lockup agreement. The shares were valued at $2,760,000, which represents 80% of the market price on date of issuance.

(4) In 2005, we issued Mr. Goodman 200,000 shares our common stock subject to a two-year lockup agreement. The shares were valued at $240,000, which represents 80% of the market price on date of issuance.

(5) In 2004, we issued Mr. Berks 1,000,000 shares its common stock subject to a three-year lockup agreement. The shares were valued at $2,380,000, which represents 70% of the market price on date of issuance. In addition, in 2004, we issued Mr. Berks an additional 7,500 shares of our common stock which was valued at $24,000, the fair value of the shares on date of issuance.

(6) In 2005, we issued Mr. Berks 500,000 shares our common stock subject to a two-year lockup agreement. The shares were valued at $600,000, which represents 80% of the market price on date of issuance.

(7) During 2004, we issued 2,260,000 shares of our common stock to Mr. Freedman a member of the Board and Company Secretary, which were valued at $4,972,000, which represents 80% of the market price on the date of issuance. The shares are subject to a two-year lockup agreement.

(8) In 2005, we issued Mr. Freedman 200,000 shares our common stock subject to a two-year lockup agreement. The shares were valued at $240,000, which represents 80% of the market price on date of issuance.

(9) In 2003, Mr. Bernstein's 1,962 shares of common stock held in escrow were vested, and he recognized $19,617 in additional compensation as a result.

(10) In 2003, we issued 1,000 shares of common stock to Mr. Goodman. The shares were valued at $10,000, the fair value of the shares on date of issuance.

(11) In 2003, we issued 3,000 shares of common stock to Mr. Berks. The shares were valued at $30,000, the fair value of the shares on date of issuance.

Directors' Compensation

Directors of our company who are also employees do not receive cash compensation for their services as directors or members of the committees of the board of directors. All directors may be reimbursed for their reasonable expenses incurred in connection with attending meetings of the board of directors or management committees.

Employment Contract

On September 24, 2003, we entered into an Employment Agreement with Robert M. Bernstein, our President, Chief Executive Officer, and Chief Financial Officer. Pursuant to the Employment Agreement, we will employ Mr. Bernstein for a period of 3 years commencing September 24, 2003. Mr. Bernstein will be paid an annual base salary of $16,000 per month ("Base Salary"), of which $6,000 per month shall be deferred until the later of (i) 18 months from September 24, 2003, or (ii) when we report at least $250,000 of earnings before depreciation and amortization in one fiscal quarter. During the term of his employment and for a period thereafter, Mr. Bernstein will be subject to non-disclosure, non-competition and non-solicitation provisions, subject to standard exceptions.

Upon the execution of the employment agreement, Mr. Bernstein was issued an aggregate 300,000 shares of our common stock.

Other Compensation

There are no annuity, pension or retirement benefits proposed to be paid to officers, directors, or employees of our company in the event of retirement at normal retirement date as there was no existing plan as of December 31, 2005 provided for or contributed to by our company.

Stock Options

We have three stock option plans: The 1998 Stock Plan (“the 1998 Plan”), the 2002 Stock Issuance/Stock Plan (“the 2002 Plan”) and the 2003 Stock Option, SAR and Stock Bonus Consultant Plan (“the 2003 Plan”). There are currently no options outstanding under any of the plans.

In September 1998, we adopted the 1998 Plan and reserved 800,000 shares of our common stock for grant under the plan. Eligible participants include employees, advisors, consultants, and officers who provide services to us. The option price is 100% of the fair market value of a share of common stock at either the date of grant or such other day as the as the Board may determine. During 2005 and 2004, there were no options granted under the 1998 Plan. The 1998 Plan expires upon the earlier of all reserved shares being granted or September 10, 2008.

In February 2002, we adopted the 2002 Plan and reserved 20,000,000 shares of our common stock for grant under the plan. Eligible plan participants include employees, advisors, consultants, and officers who provide services to us. The option price is 100% of the fair market value of a share of common stock at either the date of grant or such other day as the Board may determine. There were no options granted under the 2002 Plan in 2005 or 2004. The 2002 Plan expires upon the earlier of all reserved shares being awarded or December 31, 2007.

In September 2003, we adopted the 2003 Plan and reserved and 10,000,000 shares of our common stock for grant. Eligible plan participants include independent consultants. The option price shall be no less than 85% of the fair market value of a share of common stock at date of grant. During 2005 and 2004, there were no options granted under the 2003 Plan. The 2003 Plan expires upon the earlier of all reserved shares being granted or September 23, 2006.

We also have agreements with two consultants whereby we will grant options to purchase shares of our common stock upon us increasing our annual revenue by $5 million in any fiscal year over our revenues in 2002. The collective number of shares to be issued will give the two consultants a fifteen percent interest in the outstanding shares of our common stock. No grants have been made pursuant to these agreements as we have not achieved the required revenues. The agreements expire in March 2008.

The following represents a summary of the Company's compensation plans as of December 31, 2005:

Plan category	Number of securities To be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining for available for future issuance under equity compensation plans (excluding securities reflected in column a))
	(a)	(b)	(c)
Equity Compensation plans approved by shareholders	n/a	n/a	n/a
Equity Compensation plans not approved by shareholders	30,800,000	n/a	30,800,000
Total	30,800,000	n/a	30,800,000

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Other than as set forth below, during the last two fiscal years there have not been any relationships, transactions, or proposed transactions to which we were or are to be a party, in which any of the directors, officers, or 5% or greater shareholders (or any immediate family thereof) had or is to have a direct or indirect material interest.

During 2005, we paid our president $210,446, of which $192,000 pertains to salary accruing in 2005 and $18,446 pertained to salary accrued in a previous year.

During 2005, we accrued $203 of interest on loans due us from our president. The balance of the loans owed by our president including accrued interest as of December 31, 2005 totaled $2,153.

During 2005, we accrued $3,989 of interest due us from our president on a stock subscription. The balance owed us on this subscription as of December 31, 2005 totaled $59,085.

During 2005, we issued Mr. John Goodman, a member of the board and our employee, 200,000 shares of our common stock subject to a two year lockup agreement. The shares were valued at $240,000.

During 2005, we issued Mr. William Berks, Vice-President, Director, and our employee, 500,000 shares of our common stock subject to a two year lockup agreement. The shares were valued at $600,000.

During 2005, we issued Mr. Joel Freedman, Director, and Corporate Secretary, 200,000 shares of our common stock subject to a two year lockup agreement. The shares were valued at $240,000.

During 2004, we paid our president $196,000 of the accrued compensation we owed him. Mr. Bernstein paid down the loan balance he owed us by $90,450. The remaining balance due from him at December 31, 2004 was $1,950. Interest credited to operations on this loan for 2004 amounted to $8,460.

The balance on the stock subscription due from our president at December 31, 2004 totaled $55,096. Interest credited to operations on this receivable for 2004 amounted to $4,000.

During 2004, we issued 1,500,000 shares of our common stock to Mr. Goodman, a member of the board and our employee that were valued at $2,760,000. The shares are subject to a two-year lockup agreement.

During 2004, we issued 2,260,000 shares of our common stock to Mr. Freedman a member of the Board and our Secretary, that were valued at $4,972,000. The shares are subject to a two-year lockup agreement.

During 2004, we issued 1,000,000 shares of our common stock to Mr. Berks, Vice-President and Director, that were valued at $2,380,000. The shares are subject to a three-year lockup agreement. In addition, we in 2004 issued Mr. Berks 7,500 shares of our common stock that were valued at $24,000.

CHANGES IN REGISTRANT'S CERTIFYING ACCOUNTANT

Gumbiner, Savett, Finkel, Fingleson & Rose, Inc., Certified Public Accountants (hereinafter "Gumbiner") was dismissed by us as our principal independent accountant, effective June 3, 2004. Gumbiner's report on the financial statements for the year ended December 31, 2003, contained a modification as to the uncertainity of us continuing as a going concern.

We engaged Farber & Hass, LLP as the principal accountant to audit our financial statements effective as of June 3, 2004. Farber & Hass, LLP (hereinafter "Farber") was dismissed by us as our principal independent accountant, effective January 20, 2005. Farber did not issue a report in either of the last two years, as they were engaged only to perform reviews of the our interim financial statements for each of the three quarters in the period ended September 30, 2004. The decision to change accountants was recommended and approved by the Board of Directors. There were no disagreements with Farber on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure from the time of their appointment as our certifying accountant through January 20, 2005.

We engaged Corbin & Company, LLP (hereinafter "Corbin") as the principal accountants to audit our financial statements effective as of January 21, 2005. We, during our most recent fiscal year and any subsequent interim period to the date hereof, did not have discussions nor have we consulted with Corbin regarding the following: (i) the application of accounting principles to a specified transaction, either completed or proposed or the type of audit opinion to be rendered on our financial statements, and neither a written report was provided to us nor oral advice was provided that Corbin concluded was an important factor considered by us in reaching a decision as to the accounting, auditing or financial reporting issue; or (ii) any matters that were the subject of a "disagreement", as that term is defined in Item 304(a)(1)(iv) of Regulation S-B and the related instructions to Item 304 of Regulation S-B, or a reportable event.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of our common stock as of June 7, 2006

• by each person who is known by us to beneficially own more than 5% of our common stock;

• by each of our officers and directors; and

• by all of our officers and directors as a group.

CLASS OF STOCK	NAME AND ADDRESS OF BENEFICIAL OWNER	AMOUNT AND NATURE OF BENEFICIAL OWNERSHIP	PERCENT OF CLASS (1)
Class A Common Stock	Robert M. Bernstein, CEO Suite 707 11661 San Vicente Blvd. Los Angeles, CA 90049	21,987,850 Shares	8.8%
	Joel R. Freedman, Director 1 Bala Plaza Bala Cynwyd, PA 19004	2,603,000 Shares	1.0%
	John Goodman, Director Suite 707 11661 San Vicente Blvd. Los Angeles, CA 90049	2,630,000 Shares	1.0%
	William Berks, Vice President Government Projects Suite 707 11661 San Vicente Blvd. Los Angeles, CA 90049	2,512,500 Shares	1.0%
	Birchington Investments Ltd. Suite 621(1/2) Europort, Gibraltar	11,850,000 Shares	4.7%
Class B Common Stock	Robert M. Bernstein Suite 707 11661 San Vicente Blvd. Los Angeles, CA 90049	600,000 Shares(2)	100.00%
	Directors and executive officers as a group (4 persons)	29,733,350 Shares	11.9%

(1) Unless otherwise indicated, based on 250,089,077 shares of common stock outstanding. Shares of common stock subject to options or warrants currently exercisable, or exercisable within 60 days, are deemed outstanding for purposes of computing the percentage of the person holding such options or warrants, but are not deemed outstanding for purposes of computing the percentage of any other person.

(2) Each share of Class B common stock has 2,000 votes on any matter on which the common shareholders vote. As a result, Mr. Bernstein holds 1.2 billion votes represented by the Class B common stock, and 85.5% of the overall votes.

DESCRIPTION OF SECURITIES BEING REGISTERED

COMMON STOCK

We are authorized to issue up to 1,699,400,000 and 600,000 shares of Class A Common Stock, par value $.001, and Class B Common Stock, par value $.001, respectively. As of June 7, 2006, we had approximately 1,602 holders of our common stock and 1 holder of our Class B common stock. Holders of the common stock are entitled to one vote per share and holders of the Class B common stock are entitled to 2,000 votes per share on all matters to be voted upon by the stockholders. The Class B common stock is convertible to common stock on a one-for-one basis. Holders of common stock and Class B Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. Upon the liquidation, dissolution, or winding up of our company, the holders of common stock and Class B Common Stock common stock are entitled to share ratably in all of our assets which are legally available for distribution after payment of all debts and other liabilities and liquidation preference of any outstanding common stock or Class B Common Stock common stock. Holders of common stock and Class B Common Stock common stock have no preemptive, subscription, redemption or conversion rights. The outstanding shares of common stock and Class B Common Stock common stock are validly issued, fully paid and nonassessable.

We have engaged Interwest Transfer Company, Inc., 1981 East 4800 South, Suite 100, Salt Lake City, Utah 84117, as independent transfer agent or registrar.

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Articles of Incorporation, as amended and restated, provide to the fullest extent permitted by Section 145 of the General Corporation Law of the State of Delaware, that our directors or officers shall not be personally liable to us or our shareholders for damages for breach of such director's or officer's fiduciary duty. The effect of this provision of our Articles of Incorporation, as amended and restated, is to eliminate our rights and our shareholders (through shareholders' derivative suits on behalf of our company) to recover damages against a director or officer for breach of the fiduciary duty of care as a director or officer (including breaches resulting from negligent or grossly negligent behavior), except under certain situations defined by statute. We believe that the indemnification provisions in our Articles of Incorporation, as amended, are necessary to attract and retain qualified persons as directors and officers.

Our By Laws also provide that the Board of Directors may also authorize us to indemnify our employees or agents, and to advance the reasonable expenses of such persons, to the same extent, following the same determinations and upon the same conditions as are required for the indemnification of and advancement of expenses to our directors and officers. As of the date of this Registration Statement, the Board of Directors has not extended indemnification rights to persons other than directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Act" or "Securities Act") may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

PLAN OF DISTRIBUTION

The selling stockholder and any of its pledgees, donees, assignees and other successors-in-interest may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares:

• ordinary brokerage transactions and transactions in which the broker-dealer solicits the purchaser;

• block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

• purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

• an exchange distribution in accordance with the rules of the applicable exchange;

• privately-negotiated transactions;

• broker-dealers may agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;

• through the writing of options on the shares

• a combination of any such methods of sale; and

• any other method permitted pursuant to applicable law.

The selling stockholder may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus. The selling stockholder shall have the sole and absolute discretion not to accept any purchase offer or make any sale of shares if they deem the purchase price to be unsatisfactory at any particular time.

The selling stockholder or its pledgees, donees, transferees or other successors in interest, may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for themselves or their customers. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. It is possible that a selling stockholder will attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then market price. The selling stockholder cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, the selling stockholder. The selling stockholder and any brokers, dealers or agents, upon effecting the sale of any of the shares offered in this prospectus, may be deemed to be "underwriters" as that term is defined under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, or the rules and regulations under such acts. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares, including fees and disbursements of counsel to the selling stockholder, but excluding brokerage commissions or underwriter discounts.

The selling stockholder, alternatively, may sell all or any part of the shares offered in this prospectus through an underwriter. No selling stockholder has entered into any agreement with a prospective underwriter and there is no assurance that any such agreement will be entered into.

The selling stockholder may pledge its shares to their brokers under the margin provisions of customer agreements. If a selling stockholder defaults on a margin loan, the broker may, from time to time, offer and sell the pledged shares. The selling stockholder and any other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations under such act, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the shares by, the selling stockholder or any other such person. In the event that the selling stockholder are deemed affiliated purchasers or distribution participants within the meaning of Regulation M, then the selling stockholder will not be permitted to engage in short sales of common stock. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to specified exceptions or exemptions. In regards to short sells, the selling stockholder is contractually restricted from engaging in short sells. In addition, if a such short sale is deemed to be a stabilizing activity, then the selling stockholder will not be permitted to engage in a short sale of our common stock. All of these limitations may affect the marketability of the shares.

We have agreed to indemnify the selling stockholder, or their transferees or assignees, against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or to contribute to payments the selling stockholder or their respective pledgees, donees, transferees or other successors in interest, may be required to make in respect of such liabilities.

If the selling stockholder notifies us that it has a material arrangement with a broker-dealer for the resale of the common stock, then we would be required to amend the registration statement of which this prospectus is a part, and file a prospectus supplement to describe the agreements between the selling stockholder and the broker-dealer.

PENNY STOCK

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

SELLING STOCKHOLDERS

The table below sets forth information concerning the resale of the shares of common stock by the selling stockholder. We will not receive any proceeds from the resale of the common stock by the selling stockholder. We will receive proceeds from the exercise of the warrants. Assuming all the shares registered below are sold by the selling stockholder, it will not continue to own any shares of our common stock.

The following table also sets forth the name of each person who is offering the resale of shares of common stock by this prospectus, the number of shares of common stock beneficially owned by each person, the number of shares of common stock that may be sold in this offering and the number of shares of common stock each person will own after the offering, assuming they sell all of the shares offered.

Name	Total Shares of Common Stock Issuable Upon Conversion of Debenture and/or Warrants	Total Percentage of Common Stock, Assuming Full Conversion	Shares of Common Stock Included in Prospectus (1)	Beneficial Ownership Before the Offering*	Beneficial Percentage of Common Stock Owned Before Offering*	Ownership After the Offering (4)	Percentage of Common Stock Owned After Offering (4)
Golden Gate Investors Investors, Inc. (2)	68,518,519(3)	27.40%	Up to 68,518,519 shares of common stock	24,983,899	9.99%	--	--
Lynx Consulting (5)	735,747(6)	**	Up to 735,747 shares of common stock	735,747	**	--	--

* These columns represents the aggregate maximum number and percentage of shares that the selling stockholder can own at one time (and therefore, offer for resale at any one time) due to their 9.9% limitation.

**Less than 1%.

The number and percentage of shares beneficially owned is determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rule, beneficial ownership includes any shares as to which the selling stockholder has sole or shared voting power or investment power and also any shares, which the selling stockholder has the right to acquire

within 60 days. The actual number of shares of common stock issuable upon the conversion of the convertible debenture is subject to adjustment depending on, among other factors, the future market price of the common stock, and could be materially less or more than the number estimated in the table.

(1) Includes a good faith estimate of the shares issuable upon conversion of the convertible debenture and exercise of warrants, based on current market prices. Because the number of shares of common stock issuable upon conversion of the convertible debenture is dependent in part upon the market price of the common stock prior to a conversion, the actual number of shares of common stock that will be issued upon conversion will fluctuate daily and cannot be determined at this time. Under the terms of the convertible debenture, if the convertible debenture had actually been converted on June 8, 2006, the conversion price would have been $.081. The actual number of shares of common stock offered in this prospectus, and included in the registration statement of which this prospectus is a part, includes such additional number of shares of common stock as may be issued or issuable upon conversion of the convertible debenture and exercise of the related warrants by reason of any stock split, stock dividend or similar transaction involving the common stock, in accordance with Rule 416 under the Securities Act of 1933. However the selling stockholder has contractually agreed to restrict their ability to convert their convertible debenture or exercise their warrants and receive shares of our common stock such that the number of shares of common stock held by them in the aggregate and their affiliates after such conversion or exercise does not exceed 9.99% of the then issued and outstanding shares of common stock as determined in accordance with Section 13(d) of the Exchange Act. Accordingly, the number of shares of common stock set forth in the table for the selling stockholder exceeds the number of shares of common stock that the selling stockholder could own beneficially at any given time through their ownership of the convertible debenture and the warrants. In that regard, the beneficial ownership of the common stock by the selling stockholder set forth in the table is not determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

(2) The selling stockholder is an unaffiliated third party. In accordance with rule 13d-3 under the Securities Exchange Act of 1934, Norman Lizt may be deemed a control person of the shares owned by the selling stockholder.

(3) Includes 18,518,519 (150%) shares of common stock underlying our $1,000,000 convertible debenture and 50,000,000 shares of common stock underlying common stock purchase warrants issued to Golden Gate Investors, Inc.

(4) Assumes that all securities registered will be sold, which does not represent all of the shares of common stock potentially issuable upon conversion of the convertible debenture held by Golden Gate at current market prices.

(5) The selling stockholder is an unaffiliated third party. In accordance with rule 13d-3 under the Securities Exchange Act of 1934, Michael Sobeck and Chris Lipa may be deemed control persons of the shares owned by the selling stockholder. The selling stockholder has notified us that they are not broker-dealers or affiliates of broker-dealers and that they believe they are not required to be broker-dealers.

(6) Includes shares of common stock issued to the selling stockholder pursuant to that certain Investor Relations Services Agreements dated as of December 8, 2005 and February 7, 2006 as compensation for investor relations services performed by the selling stockholder under said agreements.

Terms of Convertible Debenture

To obtain funding for our ongoing operations, we entered into a Securities Purchase Agreement with Golden Gate Investors, Inc. ("Golden Gate") on December 16, 2005, as amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement, and that certain Addendum to Convertible Debenture and Warrant to Purchase Common Stock, each dated as of December 16, 2005, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of May 2, 2006 and Securities Purchase Agreement dated as of May 30, 2006, and as further amended by that certain Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement dated as of June 9, 2006, and as further amended bv that certain Addendum to Warrant to Purchase Common Stock dated as of June 12, 2006, for the sale of (i) $1,000,000 in convertible debenture and (ii) warrants to buy 50,000,000 shares of our common stock. This prospectus relates to the resale of the common stock underlying this convertible debenture and warrants.

On May 2, 2006, we entered into an Addendum to Convertible Debenture, Warrant to Purchase Common Stock and Securities Purchase Agreement with Golden Gate pursuant to which we increased the principal amount of the debenture to $1,000,000, provided that previous amounts provided to us by Golden Gate ($75,000) were applied to the purchase price. Upon the filing of the registration statement we are required to file registering shares of our common stock underlying the debenture and the warrants, Golden Gate will provide us with $20,000. In addition, within 5 days of the effectiveness of the registration statement, we are required to issue 20,000,000 shares of common stock to be held in escrow and to be released upon conversions of the debenture by Golden Gate. Upon receipt of the 20,000,000 shares, Golden Gate is required to immediately wire to us the remainder of the purchase price ($1,000,000 less the sum of all amounts previously advanced to us).

The debenture bears interest at 5¼%, mature three years from the date of issuance, and are convertible into our common stock, at the selling stockholder's option. The conversion price of the convertible debenture is the lesser of (i) $0.70, (ii) eighty percent of the average of the three lowest volume weighted average prices during the twenty (20) trading days prior to the conversion or (iii) eighty percent of the volume weighted average price on the trading day prior to the conversion. Accordingly, there is in fact no limit on the number of shares into which the debenture may be converted. Golden Gate has agreed that, beginning in the first full calendar month after the registration statement is declared effective, it shall convert at least 10%, but no more than 40%, of the debenture per calendar month, provided that the common stock is available, registered and freely tradable; provided that, we may reduce the monthly maximum conversion from 40% to 6% for any three calendar months during the term of the debenture upon ten business days notice prior to the first day of the applicable calendar month. However, in the event that our volume weighted average price is less than $.05, we will have the option to prepay the debenture at 108% rather than have the debenture converted. If we elect to prepay the debenture, Golden Gate may withdraw its conversion notice. Golden Gate has agreed that, beginning in the first full calendar month after the registration statement is declared effective, it shall exercise 1,250,000 warrants per week until all warrants are exercised. The warrant is exercisable into 50,000,000 shares of common stock at an exercise price of $.01 per share, provided that, the exercise price shall be equal to the price at which we sell common stock (through direct stock issuances, and/or conversions or exercises of convertible securities, but not including common stock issued as compensation for services performed on our behalf) during the 30 days prior to the applicable exercise date.

The selling stockholder has contractually agreed to restrict its ability to convert its debenture or exercise its warrants and receive shares of our common stock such that the number of shares of common stock held by them and their affiliates after such conversion or exercise does not exceed 9.99% of the then issued and outstanding shares of common stock.

Sample Conversion Calculation

The convertible debentures are convertible into the number of our shares of common stock equal to the dollar amount of the debentures being converted is divided by the lesser of (i) $0.70, (ii) eighty percent of the average of the three lowest volume weighted average prices during the twenty (20) trading days prior to the conversion or (iii) eighty percent of the volume weighted average price on the trading day prior to the conversion. For example, assuming conversion of $1,000,000 of debenture on June 8, 2006, a conversion price of $0.081 per share, the number of shares issuable upon conversion would be:

$1,000,000/$.081 = 12,345,679

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The following is an example of the amount of shares of our common stock that are issuable, upon conversion of the principal amount of our convertible debenture, based on market prices 25%, 50% and 75% below the market price, as of June 7, 2006 of $0.10.

% Below Market	Price Per Share	Effective Conversion Price	Number of Shares Issuable	% of Outstanding Stock
25%	$.075	$.06	16,666,667	6.25%
50%	$.050	$.04	25,000,000	9.09%
75%	$.025	$.02	50,000,000	16.66%

LEGAL MATTERS

Sichenzia Ross Friedman Ference LLP, New York, New York will issue an opinion with respect to the validity of the shares of common stock being offered hereby.

EXPERTS

Corbin & Company, LLP have audited, as set forth in their report thereon appearing elsewhere herein, our consolidated financial statements at December 31, 2005 and for each of the years in the two-year period then ended that appear in the prospectus. The financial statements referred to above are included in this prospectus with reliance upon the auditors' opinion based on their expertise in accounting and auditing.

AVAILABLE INFORMATION

We have filed a registration statement on Form SB-2 under the Securities Act of 1933, as amended, relating to the shares of common stock being offered by this prospectus, and reference is made to such registration statement. This prospectus constitutes the prospectus of Material Technologies, Inc., filed as part of the registration statement, and it does not contain all information in the registration statement, as certain portions have been omitted in accordance with the rules and regulations of the Securities and Exchange Commission.

We are subject to the informational requirements of the Securities Exchange Act of 1934 which requires us to file reports, proxy statements and other information with the Securities and Exchange Commission. Such reports, proxy statements and other information may be inspected at public reference facilities of the SEC at Judiciary Plaza, 100 F Street N.E., Washington D.C. 20549. Copies of such material can be obtained from the Public Reference Section of the SEC at Judiciary Plaza, 100 F Street N.E., Washington, D.C. 20549 at prescribed rates. Because we file documents electronically with the SEC, you may also obtain this information by visiting the SEC's Internet website at http://www.sec.gov.

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MATERIAL TECHNOLOGIES, INC.
FINANCIAL STATEMENTS

For the Three Months Ended March 31, 2006 and 2005 (unaudited)

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MATERIAL TECHNOLOGIES, INC.
(A Development Stage Company)

CONSOLIDATED BALANCE SHEET

		MARCH 31, 2006
ASSETS		
Current assets:		
Cash and cash equivalents	$	22,695
Investments in marketable securities held for trading		130,392
Investments in marketable securities available for sale		174,435
Prepaid expenses and other current assets		2,206
Total current assets		329,728
Investments in non-marketable securities		3,582,600
Property and equipment, net		9,234
Intangible assets, net		5,275
Deposit		2,348
	$	3,929,185

Continued . . .
See accompanying notes to consolidated financial statements

MATERIAL TECHNOLOGIES, INC.
(A Development Stage Company)

CONSOLIDATED BALANCE SHEET

		March 31, 2006
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable and accrued expenses	$	299,337
Current portion of research and development sponsorship payable		25,000
Notes payable		88,921
Investments deriviative liability		662,646
Convertible debentures and accrued interest payable, net of discount of $299,565		1,084,196
Total current liabilities		2,160,100
Research and development sponsorship payable, net of current portion		741,890
Convertible debentures and accrued interest payable, net of discount of $35,556		4,588
Derivative and warrant liabilities		8,012,557
Total liabilities		10,919,135
Minority interest in consolidated subsidiary		825

Commitments and contingencies	
Stockholders' deficit:	
Class A preferred stock, $0.001 par value, liquidation preference of $720 per share; 350,000 shares authorized; 337 shares issued and outstanding	-
Class B preferred stock, $0.001 par value, liquidation preference of $10,000 per share; 15 shares authorized; none issued and outstanding	-
Class C preferred stock, $0.001 par value, liquidation preference of $0.001 per share; 25,000,000 shares authorized; 1,517 shares issued and outstanding	1
Class D preferred stock, $0.001 par value, liquidation preference of $0.001 per share; 20,000,000 shares authorized; 0 shares issued and outstanding	-
Class A Common Stock, $0.001 par value, 1,699,400,000 shares authorized; 235,710,445 shares issued; 170,290,488 shares outstanding	170,290
Class B Common Stock, $0.001 par value, 600,000 shares authorized, issued and outstanding	600
Warrants subscribed	10,000
Additional paid-in-capital	57,816,148
Deficit accumulated during the development stage	(64,618,021)
Note receivable - common stock	(226,059)
Treasury stock (138,800 shares at cost)	(34,759)
Accumulated other comprehensive loss	(108,975)
Total stockholders' deficit	(6,990,775)
	$ 3,929,185

See accompanying notes to consolidated financial statements

MATERIAL TECHNOLOGIES, INC.

(A Development Stage Company)

CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Three Months Ended March 31, 2006	For the Three Months Ended March 31, 2005	From October 21, 1983 (Inception) through March 31, 2006
Revenues:			
Research and development	$ 28,846	$ 18,308	$ 5,381,485
Other	-	-	274,125
Total revenues	28,846	18,308	5,655,610
Costs and expenses:			
Research and development	185,152	1,212,182	15,415,038
General and administrative	2,523,819	321,562	26,322,049
Total costs and expenses	2,708,971	1,533,744	41,737,087
Loss from operations	(2,680,125)	(1,515,436)	(36,081,477)
Other income (expense):			
Modification of research and development sponsorship agreement	-	-	(7,738,400)
Interest expense	(149,938)	(165,353)	(7,890,486)
Other-than-temporary impairment of marketable securities available for sale	-	-	(6,203,347)
Realized loss on sale of marketable securities	(23)	(3,499)	(3,672,462)
Unrealized loss on decrease in market value of securities held for trading	-	-	(1,523,310)
Change in fair value of derivative and warrant liabilities	(930,369)	-	(1,516,104)
Change in fair value of investment derivative liability	(76,911)	-	(76,911)
Interest income	3,891	5,023	376,466
Gain (loss) on settlement of indebtedness	-	-	(244,790)
Other	-	-	(33,000)
Other expense, net	(1,153,350)	(163,829)	(28,522,344)

Loss before provision for income taxes	(3,833,475)	(1,679,265)	(64,603,821)
Provision for income taxes	(800)	(800)	(14,200)
Net loss	$ (3,834,275)	$ (1,680,065)	$ (64,618,021)
	=============	============	==============
Per share data:			
Basic and diluted net loss per share	$ (0.02)	$ (0.02)	
	=============	============	
Weighted average Class A common shares outstanding - basic and diluted	154,392,834	87,216,240	
	=============	============	

See accompanying notes to consolidated financial statements

MATERIAL TECHNOLOGIES, INC.
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	For the Three Months Ended March 31,		From October 21, 1983 (Inception) through March 31, 2006
	2006	2005	
Net loss	$ (3,834,275)	$ (1,680,065)	$ (64,618,021)
Other comprehensive loss:			

Temporary increase (decrease) in market value of securities available for sale	12,242	(40,846)	(6,312,322)
Reclassification to other-than-temporary impairment of marketable securities available for sale	-	-	6,203,347