

FLIGHT SAFETY TECHNOLOGIES INC
Form 10KSB
September 10, 2007

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

Form 10-KSB

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended May 31, 2007
Commission file number 000-33305

FLIGHT SAFETY TECHNOLOGIES, INC.

(Name of small business issuer in its charter)

Nevada

(State or other jurisdiction of
incorporation or organization)

95-4863690

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

28 Cottrell Street, Mystic,
Connecticut 06355

(Address of principal executive
offices and Zip Code)

(860) 245-0191

(Issuer's telephone number)

Securities registered under Section 12(b) of the Exchange Act:

(Title of class)

(Name of each exchange on which registered)

Common Stock, par value \$0.001 per share
Common Stock Purchase Warrants

AMEX
AMEX

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

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the issuer was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B is not contained in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB.

Registrant's revenues for its most recent fiscal year: \$1,546,857

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

The aggregate market value of the common stock held by non-affiliates of the registrant, based on the last sale price of \$2.26 per share on September 7, 2007, as reported on the American Stock Exchange, was approximately \$18,679,375. In determining the market value of non-affiliate voting stock, shares of common stock beneficially owned by each executive officer and director have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

There were 8,265,210 shares of common stock outstanding as of August 28, 2007.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to the registrant's 2007 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

Transitional Small Business Disclosure Format (Check one): Yes ; No

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Preliminary Note: Cautionary Statement Pursuant to Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995:

Except for the historical information presented in this document, the matters discussed in this annual report on Form 10-KSB for the fiscal year ending May 31, 2007 or otherwise incorporated by reference into this document, contain "forward-looking statements" (as such term is defined in the Private Securities Litigation Reform Act of 1995). These statements are identified by the use of forward-looking terminology such as "believes", "plans", "intend", "scheduled", "potential", "continue", "estimates", "hopes", "goal", "objective", "expects", "may", "will", "should" or "anticipates" or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties. The safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, apply to forward-looking statements made by us. We caution you that no statements contained in this Form 10-KSB should be construed as a guarantee or assurance of future performance or results. These forward-looking statements involve risks and uncertainties, which include risks and uncertainties associated with, among other things, the outcome of pending class action litigation alleging violations of federal securities laws, the outcome of Massachusetts federal district court litigation initiated by Analogic Corporation concerning our TIICM™ technology, whether the government will implement WVAS at all or with the inclusion of a SOCRATES® wake vortex sensor, the impact of competitive

products and pricing, limited visibility into future product demand, slower economic growth generally, difficulties inherent in the development of complex technology, new products sufficiency, availability of capital to fund operations, research and development, fluctuations in operating results, and these and other risks are discussed in the "Known Trends, Risks and Uncertainties" in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of this Form 10-KSB. The actual results that we achieve may differ materially from any forward-looking statements due to such risks and uncertainties. These forward-looking statements are based on current expectations, and, except as required by law, we assume no obligation to update this information whether as a result of new information, future events or otherwise. Readers are urged to carefully review and consider the various disclosures made by us in this Form 10-KSB and in our other reports filed with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business.

AWSM™, SOCRATES®, UNICORN™ and TIICM™ are trademarks of ours. This Form 10-KSB also refers to trademarks and trade names of other companies and organizations.

Unless the context indicates otherwise, all references in this Form 10-KSB to "we," "our," "us," "the company," "FST" and "Flight Safety" refer on a consolidated basis to Flight Safety Technologies, Inc, a Nevada Corporation, or to our former subsidiary, Flight Safety Technologies Operating, Inc., a Delaware corporation (sometimes referred to as "FSTO") that was merged into FST on June 27, 2003.

PART I

Item 1. Description of Business.

Overview

We are developing four new technologies designed to enhance aviation safety and efficiency. These technologies include AWSM™, SOCRATES®, UNICORN™, and TIICM™.

SOCRATES® is a technology we are developing into a ground-based laser acoustic sensor to detect and track wake vortices at airports.

AWSM™ - is a technology we are developing into a system of sensors and other components to form a wake vortex avoidance system (WVAS).

UNICORN™ is a technology we are developing into an airborne radar for collision avoidance and ground proximity warning.

TIICM™ is a technology we are developing into a system to protect commercial and military aircraft against terrorist threats from heat seeking missiles.

We are developing an aircraft wake safety management system we refer to as AWSM™ to be a full wake vortex avoidance system which may be used by Air Traffic Controllers as an advanced air traffic management tool for safely reducing the applied separation between aircraft. Studies have shown that significant gains in airport capacity may be realized through use of a system such as AWSM™. In 2006, the Joint Planning and Development Office (JPDO), which

is responsible for defining the roadmap to the Next Generation Air Transportation System (known as NextGen), published a Baseline Operational Improvement Roadmap. That document called for the reduction of longitudinal arrival/departure spacing between aircraft based on ground-based wake vortex prediction and detection. We are designing the AWSM™ system to meet that requirement. A partial system emulation, based on pre-recorded aircraft arrival data, was presented to the government on February 28, 2007.

We believe that AWSM™, upon completion and deployment at major airports, can potentially;

- Improve the safety of aircraft arrivals and departures at airports;
- Safely increase runway landing and takeoff rates;
- Reduce passenger delays; and
- Generate substantial cost savings for the airline industry and other airport users.

We are developing SOCRATES® technology to be a component for possible inclusion in AWSM™. From 1997 to 2005, we focused on developing and testing the SOCRATES® wake vortex sensor technology. Much of this work was funded by the U.S. Department of Transportation (DOT) and managed by the DOT Volpe Center in Cambridge, Massachusetts. On September 13, 2003, we completed a three-week test of an improved SOCRATES® wake vortex sensor at Denver International Airport. Based upon our analysis of initial data, this test demonstrated a major increase in the capability and reliability of the sensor. Building upon these three tests, we further developed our SOCRATES® wake vortex sensor and tested a 16-beam configuration during September 2005. Based on our analysis of the data, this 2005 test demonstrated a further increase in the capability and reliability of our SOCRATES® wake vortex sensor.

During this time, we generally subcontracted to Lockheed Martin Corporation significant participation in the development and assembly of the hardware components of our SOCRATES® wake vortex sensor, including the low-power laser generators, reflectors, and receivers. Lockheed Martin Corporation personnel also have supported the operation of this equipment during tests of our SOCRATES® wake vortex sensor through various stages of development to date, have been developing software used in analyzing test data and have worked with us in analyzing test data itself. Our payments to Lockheed Martin Corporation averaged approximately \$825,000 or 34% of our average contract revenue for FY 2007 and FY 2006. As of May 31, 2007, pursuant to the terms of the teaming agreement, this relationship terminated.

Starting in September 2005, our Volpe DOT contract directed us to commence the development of AWSM™ technology. In February 2007 we presented an initial functional emulation of much of the hardware and software integration of AWSM™ technology, utilizing pre-recorded sensor data from the September 2005 SOCRATES® tests as well as Lockheed Martin's Lidar sensor subsystem. Depending on government direction and approval of test protocols, and funding availability, we are contemplating further AWSM™ technology development and testing including live emulation tests of the full system and safety assessment demonstrations. The prospects for if and when the government, particularly the Federal Aviation Administration, will provide any such direction, approval or funding are

uncertain and we can make no assurance as to whether or when we will proceed with further testing of AWSM™ technology.

We also are developing a collision avoidance and ground proximity warning system for aircraft based on our technology referred to as UNICORN™. On September 13, 2002, we received a frequency assignment from the Federal Communications Commission for experimental purposes and development of UNICORN™ technology which was renewed under certain conditions on September 1, 2006. Having re-applied for renewal, we are still able to use the frequency for development of the technology. In August 2003, we signed a contract with Georgia Tech Research Institute, (GTRI), under which GTRI commenced work on the construction of our

UNICORN™ technology antenna elements. We also contracted with Microwave Solutions, Limited, in England to produce the radar electronic modules. An initial proof-of-principle tower based test of UNICORN™ technology antenna elements, one of the major components of a potential UNICORN™ system, was conducted in August of 2005. During our fiscal year 2007, we curtailed research and development of UNICORN™ technology while we pursue the possibility of raising research and development funding for UNICORN™ through a tax-advantaged research and development partnership.

During our fiscal year 2007, we continued pursuing a third new technology initiative, called TIICM™ (Tactical Integrated Illuminating Countermeasure), for protection of military or commercial aircraft against certain shoulder-launched terrorist missile threats. We believe that TIICM™ technology may be a more cost-effective solution to this problem than competing military systems which are currently being funded by the government. We had been working on development of TIICM™ technology with Sanders Design International, a small innovative defense contractor based in New Hampshire and Analogic Corp (NASDAQ: ALOG) a larger company based in Peabody, Massachusetts. On June 26, 2006, Analogic filed a lawsuit against us and SDI, alleging that a teaming agreement between us and SDI should be invalidated. We are actively defending this lawsuit. We have incurred direct costs of approximately \$700,000 for TIICM™ technology research and development thus far, not including overhead and general and administrative costs. During and since the end of our fiscal year 2007, we have curtailed our research and development on TIICM™ technology pending resolution of this lawsuit.

We contracted with Georgia Tech Research Institute (GTRI) to utilize their government validated simulation model to subject TIICM™ technology to over 100,000 simulated missile attacks on a Boeing 737 aircraft. Preliminary results of this analysis were encouraging. There can be no assurance as to if, or when, we will be able to successfully develop TIICM™ technology, that our TIICM™ technology efforts will result in any contracts, or revenues, or profits, to us, or that our relationships with other companies to develop TIICM™ technology will be successfully formalized, or that there will be any revenues, or profits, to us.

Since our inception, our primary source of funding has been four successive contracts with the federal government aggregating approximately \$19.8 million for research, development and testing of our SOCRATES® wake vortex sensor. We have not had any revenues from commercial sales of any of our technologies, and we may not realize such sales for several years. We have incurred cumulative losses of \$9,341,826 as of May 31, 2007, which we have funded with the proceeds of three equity offerings. We will need additional funds to complete our future research and development of these technologies and may need to raise additional capital for this purpose. We may consider and

execute from time to time strategic investments, acquisitions or other transactions that we believe will benefit us and complement our current operations, technologies, and resources.

History

We are a Nevada corporation that was incorporated in May 2001 under the name of Reel Staff, Inc. to provide staffing services to film, video and television production companies. Prior to a share exchange in September 2002 with the shareholders of Flight Safety Technologies, Inc., (FSTO), a Delaware corporation, our operations were minimal and our revenues were not material. Our organization and limited operations primarily were funded by (i) a contribution of services from shareholders, who in return were issued common stock and (ii) \$12,075 of proceeds from a private placement of our common stock to investors. In October 2001, we registered these shares with the SEC under the Securities Act of 1933 pursuant to an SB-2 Registration Statement, as amended, that we filed with the SEC in order to make our shares of common stock eligible for public trading. Since that time, we have filed periodic reports with the SEC pursuant to the Securities Exchange Act of 1934.

FSTO, which originally commenced operations in 1997 as a Wyoming corporation, was co-founded by two of our directors, Samuel A. Kovnat and Frank L. Rees. In consideration of his shares, Mr. Rees assigned his SOCRATES® and UNICORN™ patents to FSTO. In consideration of Mr. Kovnat's shares, he contributed intellectual capital and services to FSTO. Advanced Acoustic Concepts, Inc. and Leonard Levie were also founders of FSTO. Advanced Acoustic Concepts, Inc. received shares of common stock in FSTO in consideration of its release of any claims on the UNICORN™ patent contributed by Mr. Rees, and Mr. Levie received his shares in consideration of contributing his business experience, and developing an initial business plan for FSTO. As a result, FSTO owned patents on our SOCRATES® and UNICORN™ technologies.

FSTO received the original contract with the federal government for the research and development of our SOCRATES® technology in connection with its potential application to wake vortices on May 29, 1997. On November 3, 2000, FSTO completed a private placement of preferred stock arranged by Spencer Trask Securities Incorporated which resulted in net proceeds to us of approximately \$1,500,000. In consideration of this placement, Spencer Trask Intellectual Capital Company, LLC received shares of our common stock and warrants to acquire our preferred stock, as well as placement agency fees and reimbursement of certain costs. All of the preferred shares and warrants for preferred shares were converted, respectively, to common stock and warrants for common stock pursuant to their terms as a result of a share exchange.

In September 2002, we consummated a share exchange with the stockholders of FSTO. The share exchange was facilitated by Dunhill Venture Partners Corp., a Vancouver, British Columbia based firm. Dunhill Venture Partners Corp. also facilitated a private placement of a total of 283,334 shares of our common stock and 283,334 warrants, each for one share of our common stock, to Wakefield Holdings Corp. and Nicholson Group Limited, pursuant to Regulation S promulgated by the SEC, which resulted in aggregate proceeds to us of \$1.7 million. In January 2003, we registered these shares and the warrant shares with the SEC

pursuant to an SB-2 Registration Statement. During July and August 2003, the warrants were exercised, and we issued the 283,334 warrant shares, generating \$1.7 million in aggregate proceeds to us. As a result of the share exchange, we discontinued our previous operations and changed our name to Flight Safety Technologies, Inc., FSTO changed its name to Flight Safety Technologies Operating, Inc., FSTO became our subsidiary and stockholders of FSTO acquired approximately 53% of our outstanding common stock. In June 2003, FSTO merged into us, and we now own the patents on and are continuing the development of our SOCRATES® and UNICORN™ technologies.

During February 2004, we sold 1,514,300 units at \$6.00 per unit in a registered underwritten secondary public offering. Each unit consisted of two shares of our common stock and a warrant to purchase one share of our common stock at \$3.30 a share. Separate trading of the common shares and warrants began on March 1, 2004. We received net proceeds from this offering of approximately \$7.6 million.

Principal Concepts Under Development and Market Opportunities

SOCRATES® Wake Vortex Sensor and the AWSM™ system

Whenever an aircraft is in flight, its wings and wing flaps create wake vortices, which are similar to horizontal tornadoes trailing back from the wing tips. If a second aircraft encounters these vortices, even several minutes after the first plane has passed, its pilot's control of the aircraft may be compromised. To address these hazards, the Federal Aviation Administration, sometimes known as the FAA, has established requirements for increased spacing between airplanes as they land and take off. The spacing translates into more time in the air, which results in flight delays and increased fuel and flight crew costs. Requirements for even larger spacing for aircraft trailing the new, very large Airbus A380 are anticipated to further exacerbate wake-related flight delays.

Our initial focus for SOCRATES® technology has been the development of a wake vortex sensor to detect, locate and track wake vortex turbulence, based on the sound radiated by the turbulence. The sensor design includes a low-power laser transmitter and receiver, a laser beam reflector and special optical and electronic components to translate changes in laser transmissions caused by their interaction with sound radiation from the vortices, and determine the presence and location of wake vortex turbulence. While our present focus is on air turbulence created by aircraft wakes, we believe that with future research and development our SOCRATES® technology may also enable the detection of various hazardous atmospheric phenomena, such as wind shear and microbursts. If and when we successfully complete further development, testing and obtain FAA approval, our sensor could become a component in a wake vortex advisory system, sometimes referred to as WVAS, to be used by air traffic controllers to establish safe separation between either arriving or departing aircraft. In furthering this development, we plan to integrate the sensor with other potential components of a WVAS, and develop operating protocols for use of our sensor with other WVAS components by air traffic controllers and pilots.

In 2006, we began to develop the Aircraft Wake Safety Management that we sometimes refer to as AWSM™ system. AWSM™ is intended to be a tool used at airports to provide air traffic control, sometimes referred to as ATC, with a recommendation to use either standard wake vortex spacing or minimum radar spacing when aircraft land or take off. We expect AWSM™ would include the following components: prediction algorithms (available from NASA) which numerically compute the motion of a vortex pair for a given aircraft and local meteorological conditions, the SOCRATES® and LIDAR sensors which would measure the motion of the same vortex pair, and weather persistence predictions (provided by NASA) which forecast the persistence of local weather conditions, adoptive spacing procedures, and communication links between sensor and ATC. In addition to providing ATC with a wake separation recommendation (e.g., either use standard wake spacing or use minimum radar spacing), AWSM™ would deliver an

estimated persistence time which would alert ATC to a possible change in the recommendation which may occur in the future (on the order of 30 minutes) and controller guidance to resolve predicted wake encounters throughout the terminal airspace. A partial system emulation based on recorded data was presented to the DOT's Volpe Center in February 2007.

In June 2003, the FAA approved a long-term mission needs statement and related investment plan that contemplates expenditures by FAA and NASA of \$206 million during the period running from U.S. fiscal year 2003 through 2010 on wake vortex detection research and development. The FAA investment plan includes deployment of a prototype WVAS and culminates in development of wake turbulence capability at selected airports and integration with controller tools. The mission needs statement has not and may not be approved at all necessary levels of the federal government, and the federal government may not provide the funding required to complete the mission needs statement. This funding must be annually requested by the FAA, authorized and approved by Congress, and approved by the President. There is no assurance as to what amount of contract funding, if any, we will receive in connection with the mission needs statement to complete the research, development, and testing of our SOCRATES® wake vortex sensor or AWSM™ technology for inclusion in a WVAS. Through U.S. fiscal year ending September 30, 2007, the FAA has not requested Congress to appropriate any significant funds for this purpose. The FAA has assigned an overall moderate to high risk rating to the implementation of this program due to technical unknowns and risks associated with getting controllers and pilots to accept a ground or flight deck based system.

We believe the FAA's substantial investment in addressing the problems associated with wake vortex turbulence and its issuance of the long-term mission needs statement for wake turbulence indicate its awareness that there is a growing need in the aviation industry for technologies to combat the wake vortex problem. There are many other participants and constituencies that could have an interest in the deployment and financing of our technology. For example, the International Federation of Airline Pilots Associations, (IFALPA), which represents over

100,000 pilots worldwide and is recognized as the global voice of pilots on both labor and aviation safety issues, officially states a requirement for vortex monitoring in any system designed to safely reduce the current wake vortex-related spacing requirements. The busier airports, which are typically owned and operated by state and local authorities, also have a natural interest in increasing airport safety and efficiency. Airlines also could benefit from installation of AWSM™, through increased safety and efficiencies and a reduction in fuel costs attributable to delays.

AWSM™ still faces technical hurdles and, furthermore, must be accepted by a variety of constituencies involved in the National Airspace System, including, but not limited to, air traffic controllers and pilots. We can make no assurance whether or when the FAA will implement AWSM™, either with or without our SOCRATES® wake vortex sensor. At this time, we do not know if we can successfully complete development of our SOCRATES® wake vortex sensor, if the federal government will provide the funding required to complete our plan, if we will successfully implement the plan and testing, or if the government will implement AWSM™ at all or with the inclusion of our SOCRATES® wake vortex sensor.

UNICORN™ Technology

We also have pursued development of an airborne collision and ground proximity warning system we refer to as UNICORN™. As of May 31, 2007, our cumulative research and development expenditure on UNICORN™ was approximately \$1,318,000. During August, 2005 we tested a UNICORN™ prototype antenna in a successful proof-of-principle test detecting airborne aircraft. The data collected from this test was used to create a technical remediation plan for improved performance and we are pursuing additional funding in order to proceed with plans for the eventual commercialization of UNICORN™.

Our original plan for UNICORN™ technology was to provide a low-cost, combined, collision alerting and ground proximity warning capability for general aviation aircraft, including private, business and smaller regional and commercial aircraft. Since our fiscal year ended May 31, 2004, we also have been investigating the potential application of our UNICORN™-based "sense and avoid" collision avoidance technology for unmanned air vehicles, sometimes referred to as UAVs, including military, other government, and commercial operations. Accelerating government requirements for UAV applications in the U.S. domestic airspace, together with higher than anticipated development costs, production cost estimates based on information we obtained from ongoing product development that significantly exceed our initial projections, and increasing competition in the general aviation market for UNICORN™-like products, have caused us to pursue the utilization of a tax-advantaged research and development partnership for our UNICORN™ technology.

Our UNICORN™ technology is based on a unique implementation of radar technology in an airborne system to detect and track aircraft and detect the ground below and ahead of the airplane. Although further research, development and testing are required, we believe that fixed element antennas on the top and bottom of the aircraft could provide full spherical coverage for detection of collision threats up to four nautical miles away. UNICORN™ technology would alert pilots to a potential collision threat by both audible and visual means, and the locations of the threat aircraft would be shown on either an existing or dedicated cockpit display.

Following a recommendation of support from the FAA in September 2002, the Federal Communication Commission (FCC) issued us an Experimental Radio Station License facilitating UNICORN™ antenna development on either of two frequencies: 5145 MHz in the FAA aviation band and 3650-3700 MHz in the non-aviation band. These frequencies may be used at any of three designated locations in the eastern U.S. until September 1, 2006. We have since filed for an extension of the approval which, under the FCC rules allows us to continue operating under that experimental license until September, 2008.

We acquired the UNICORN™ technology from Advanced Acoustic Concepts, Inc., (AAC), in January 2000 in exchange for shares of our common stock. We have agreed to pay AAC a lump sum payment of \$150,000 after we receive revenues from sales of UNICORN™ products of \$1,000,000. In addition, we will pay to AAC a continuing royalty of 3% of all net sales of UNICORN™ products thereafter.

We have initiated discussions with the federal government about the possible use of UNICORN™ technology on Unmanned Air Vehicles, or UAV's, to perform the "detect and avoid" function. There is increasing interest on the part of civil and military authorities in operating UAVs in parts of the National Airspace System other than military restricted areas. These operations could not take place unless the collision safety issue is addressed. We believe that our UNICORN™ technology may have the potential to meet this emerging need. On April 2, 2007, we received a Phase I contract award under the Air Force Small Business Innovative Research program to investigate the feasibility of applying the UNICORN™ technology as part of a sense-and-avoid system on board UAVs.

A UNICORN™-based UAV collision avoidance system would contain an antenna and computerized electronics that are similar in concept to those used in the UNICORN™ general aviation products we have been developing. However, the audio alert and visual display would be replaced by a computerized interface with the onboard flight control system of the UAV. This interface would override the flight control system to cause the UAV to take evasive maneuvers required to avoid collision with other aircraft and/or ground-based objects such as terrain and obstructions.

TIICM™ Tactical Integrated Illumination Countermeasure Technology

TIICM™ technology is intended to provide a low-cost, highly effective shield to protect airliners against the threat of some terrorist missiles. TIICM™ technology represents a new concept that provides special infrared sources mounted on wings, tail sections and along the bottom of the aircraft fuselage sections, together with particular sequencing of these illumination sources to both attract certain missile seeker elements and "spoo" certain threat missile guidance systems.

We were developing TIICM™ technology in conjunction with Sanders Design International (SDI), a New Hampshire company, and Analogic Corporation, a company located in Peabody, Massachusetts. In April, 2004, we executed a 10-year Teaming Agreement with SDI under which we would be the prime contractor with respect to development of counter-technologies for certain anti-aircraft heat seeking shoulder fired missiles. Under additional arrangements with SDI, we filed an application for and would share with SDI ownership of the TIICM™ technology patent if the patent application results in an award of a new patent. A prior patent on an earlier technology was awarded to SDI in February, 2004, which is the subject of a 2003 license agreement between SDI and Analogic Corporation. This licensing agreement may limit our ability to earn revenue from TIICM™ technology. The legal significance of the Analogic license agreement as it relates to our Teaming Agreement with SDI and TIICM™ technology patent application is the subject of a lawsuit pending in federal court in Boston, Massachusetts which asserts, among other things, that by entering the 2004 Teaming Agreement FST and SDI infringed Analogic's rights under its 2003 license agreement with SDI.

There can be no assurance that we can successfully develop TIICM™ technology to achieve a cost-benefit advantage against more well established and mature competing technologies, or that we will receive any significant revenues or profits from TIICM™.

Sales and Marketing

SOCRATES® Wake Vortex Sensor and AWSM™ Technology

If and when we successfully complete research, development, and testing of our SOCRATES® wake vortex sensor and the AWSM™ technology, our goal is to obtain FAA approval of and support for the use of our SOCRATES® wake vortex sensor in an AWSM™ technology implementation due to the growing demand for cost-effective ways to improve airport safety and capacity and the advantages of our technology over existing alternatives. Our strategies for selling SOCRATES® and AWSM™-based products for use in airports will include:

Closely coordinating with the FAA, which would acquire and deploy the AWSM™ system, including SOCRATES® technology, at United States airports,

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Assisting airports to apply for the allocation of airport improvement grants to acquire AWSM™ systems,

Targeting the busiest U.S. airports, followed by airports in other countries, with a campaign that includes informational seminars and direct marketing,

Publicizing the advantages of our SOCRATES® wake vortex sensor and AWSM™ system in promoting advanced air safety and airport productivity to members of the U.S. Congress, aircraft manufacturers, commercial airlines, and air travel trade industry groups, and

Soliciting FAA funding for the establishment of "beta sites" for the installation of SOCRATES® and AWSM™ technologies at select U.S. airports (Anchorage, Miami, Louisville, Memphis and Dallas Fort Worth).

UNICORN™ Airborne Radar Technology

During the past two years, we have become increasingly aware of an emerging requirement to integrate collision avoidance capability into the flight control systems of unmanned aerial vehicles (referred to by the government as "see-and-avoid" for UAV's). We believe such a technology may in the future be able to penetrate the aviation industry when integrated with cooperative surveillance techniques.

The present market for UAVs is almost entirely military and very limited and the potential of an expanded market is unclear. However, the potential uses of UAV's over the next 20-30 years could include:

- Traditional military surveillance
- Customs/Border patrol surveillance
- Harbor/port surveillance
- Regional and local law enforcement
- Fire fighting
- Crop dusting

It has been estimated as many as 20,000 UAV's may be employed in the US domestic airspace over the next 20 years. If, as, and when we can complete the development and flight testing of a UAV UNICORN™ product, we intend to market UNICORN™ to:

Government - Military and Department of Homeland Security users
UAV Manufacturers
Commercial UAV users

There can be no assurance that we will successfully complete the development of UNICORN™, integrate UNICORN™ into UAV systems, or gain any market acceptance for UNICORN™ as a UAV or general aviation product.

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TIICM™ Sales and Marketing

If, as, and when, we can successfully complete sufficient research, development and testing and gain government approval of TIICM™ technology, we would anticipate initiating a market strategy to include:

Working closely with U.S. government officials to gain their support for marketing TIICM™ to the U.S. airline fleet which consists currently of about 6,800 aircraft.

Targeting an initial market of the smaller commercial aircraft currently employed, and the US airline companies that operate them.

Working with the aircraft manufacturers such as Boeing and Airbus Industries.

Working with the Air Transport Association (ATA).

Working with the U.S. Congress to provide appropriation funding for TIICM™.

Extending the potential market to include international airlines.

Extending the potential applicability of TIICM™ for use in military aircraft uses.

There can be no assurance that TIICM™ will achieve any market acceptance in any of these uses.

Competition

SOCRATES® Wake Vortex Sensor and AWSM™ System for reducing aircraft separation

The aviation and airport safety business is very competitive. We expect competition in hazardous weather applications and wake vortex detection and warning sensors and systems to intensify as air travel and airport congestion continue to increase worldwide, and as public scrutiny of aviation safety heightens. We may face competition from established companies in the aviation systems marketplace, which are currently providing or developing technologies and products such as Low Level Windshear Alert Systems, airborne and ground-based Doppler Radar, Lidar, Laser Doppler Velocimetry, Terminal Doppler Weather Radar, and the Minix Winglet. These companies include Allied Signal/Honeywell, Coherent Technologies, Northrop Equipment Corp., Raytheon Corp., Christian Hugues and others, including our former teaming member, Lockheed Martin. The chart below describes these alternative ground-based sensor technologies that might compete with SOCRATES®.

| <u>Technology</u> | <u>Description</u> | <u>Limitations</u> | <u>Mfr.</u> | <u>Status</u> |
|---|--|---|-----------------------------|--------------------------|
| Low Level Windshear Alert Systems ("LLWAS") | <p>Detects windshears & microbursts 50 - 150 feet above ground</p> <p>Alerts triggered when wind speeds are not consistent at multiple wind sensors around airport and runways</p> | <p>Limited range</p> <p>Can be unreliable</p> <p>Early warning insufficient since only detects windshear in immediate vicinity</p> | Raytheon | Commercially Available |
| Doppler Radar | <p>Airborne and ground-based systems</p> <p>Detect speed and location of disturbances by reflecting electromagnetic waves off atmospheric particles</p> | <p>Often misses small phenomena</p> <p>Limited detection range</p> <p>Need airborne rain or ice crystals to reflect radar</p> <p>Insufficient early warning</p> | Raytheon | Limited Installations |
| Lidar ("Light detection and ranging") | <p>Airborne and ground-based systems</p> <p>Detect disturbances by measuring the reflection and scattering of a powerful infrared pulse</p> <p>Greater accuracy than radar</p> | <p>Does not work in clouds</p> <p>Insufficient early warning</p> | Coherent Technologies, Inc. | Commercially Available |
| Laser Doppler Velocimetry | <p>Airborne and ground-based systems</p> | <p>Does not work in clouds</p> <p>Insufficient early warning</p> | None | Research and Development |

| | | | | |
|---|---|--|----------|--------------------------|
| | <p>Measures the speed and location of disturbances by analyzing the frequencies of two laser beams reflected off atmospheric particles</p> <p>Greater range and accuracy than radar</p> | | | |
| Terminal Doppler Weather Radar ("TDWR") | <p>Ground-based system</p> <p>Detects hazardous atmospheric conditions in the airport terminal area</p> <p>Detects changing winds to give early warning of hazardous conditions</p> <p>Highly reliable and accurate</p> | <p>Requires tall towers to be installed 8-12 miles away from airport, which are expensive and often encounter resistance from residential communities</p> <p>Does not capture small phenomena like wake vortices</p> | Raytheon | Limited Installations |
| Minix Winglet | <p>Solid, light wing tip attachment made of Kevlar and carbon</p> <p>Eliminates vortex pressure around wings</p> <p>Increases speed</p> <p>Reduces fuel consumption</p> <p>Allows aircraft to carry more weight</p> | <p>May not address the dominant wake vortices created by the outer tip of the main flap</p> <p>May adversely affect the lift-to-drag ratio of the aircraft</p> <p>May not work as advertised</p> | None | Research and Development |

We believe our SOCRATES® wake vortex sensor and AWSM™ system may offer many advantages over the products and technologies provided by these competitors, although further research, development, and testing are needed to complete our sensor and make it operational. We believe that if, as and when our SOCRATES® wake vortex sensor and AWSM™ system is fully developed and operational, these advantages may position us to penetrate the market, particularly for a ground-based wake vortex sensor. We believe the advantages of a wake vortex sensor based on our SOCRATES® technology and AWSM™ system will include:

- Greater reliability in foggy or cloudy weather conditions that often impede lidar-based systems;
- Superior accuracy, even for small disturbances other systems often miss;
- Earlier warning of potential hazards;
- No need for large atmospheric particles to detect disturbances; and
- Greater cost-effectiveness and easier implementation.

UNICORN™ Technology

Competition for the "see and avoid" function in the UAV community consists of optical and radar systems. An optical system under development by Defense Research Associates (DRA) provides fairly accurate azimuth and elevation to the target during visual weather conditions but little or no range information. The field of view is also limited to plus or minus 110 degrees in azimuth and plus or minus 20 degrees in elevation. A 35 GHz radar system tested on a UAV by the U.S. Navy is quite limited in range and also has the limited field of view.

We believe that, if and when, successfully developed and tested, our UNICORN™-based products may offer potential advantages over currently available alternatives in the UAV and, later, the general aviation market for small aircraft. Current competition in the general aviation market includes the following:

| <u>Technology</u> | <u>Description</u> | <u>Limitations</u> | <u>Mfr.</u> | <u>Status</u> | <u>Approximate 2005 Retail Price</u> |
|-----------------------------------|--|--|------------------------|---------------|--|
| Transponder | 9900BX Traffic Advisory System | Only detects transponders | Avidyne | In production | \$20,990(1) |
| Transponder | Monroy ATD-200 | Only detects transponders; Does not provide location or time to collision | Monroy | In production | \$695(2) |
| Transponder | L3-Goodrich Skywatch Traffic Advisory System | Only detects transponders | Goodrich | In production | \$24,630(3) |
| TCAS | Traffic Alert & Collision Avoidance System | Only detects transponders | Rockwell and Honeywell | In production | \$30,860 to 226,390(4) |
| Transponder | KTA 970 TCAS I | Only detects transponders | Honeywell | In production | \$30,860 |
| Transponder and terrain data base | KMH 980 TCAS/EGPWS | Only detects transponders Uses terrain database | Honeywell | In production | \$40,000 |

Notes:

- (1) Avidyne now also features its own TAS systems using Ryan technology:
- TAS600 Series \$9,990 - \$20,990 depending on performance
 - MHAS600 Series \$16,985 - \$34,985 including TAS600 series, XM weather, and weather rada/EGPWS

interfaces (but EGPWS system not included)

- (2) Zacon Flight Systems makes similar transponder-based detection products
 - a. XRX provides direction, relative altitude, and range \$1,795
 - b. MRX provides range and altitude \$499
- (3) Price for Skywatch HP TAS. Prices vary from \$17,980 to \$28,500 depending on functionality. (TCAS I capability for \$28,500)
- (4) Represents range of Honeywell/Bendix-King and Rockwell Collins TCAS I and TCAS II products

General

Our ability to compete successfully in the market for air safety products will depend on our success in:

Completing on a timely basis the research and development, prototyping, testing, and production of our SOCRATES®, AWSM™, UNICORN™-based, and TIICM™ products;

Obtaining FAA approval of our SOCRATES® wake vortex sensor, AWSM™ and UNICORN™ and TIICM™ products;

Marketing and selling our products to airports, the FAA, airlines and manufacturers and owners of general aviation aircraft;

Promoting awareness and acceptance of our products among members of the U.S. Congress and other government officials, aircraft manufacturers, commercial airlines, and air travel industry trade groups; and

Developing and/or acquiring additional technologies and products to meet the changing needs of the aviation industry.

If and when we successfully complete development of any of our technologies, of which there can be no assurance, actual deployment will present us with major systems integration challenges. Our competitors have far greater resources and experience in developing and integrating major air safety systems that would be important in what we expect would be a government sponsored competition to select a systems integrator. Our size, limited experience

and limited resources would place us at a significant disadvantage in any such competition and might require us to seek a partner or become a team member with larger companies, in which event our role and profit opportunity may be limited. We can make no assurance of our ability to find a partner, join a team or otherwise compete successfully to obtain commercial contracts for deployment of any of our technologies even if we successfully complete their development.

Many of our potential competitors have longer operating histories, greater name and brand recognition and substantially greater financial, technical, marketing, management, service, support, and other resources than we do. Therefore, they may be better able to respond than we can to new or changing requirements, technologies, or standards. We may not be able to compete successfully against current or future competitors, and the competitive

pressures may materially and adversely affect our business, operating results and financial condition.

Government Funding

A substantial amount of our time and expenditures have been spent on the research, development and testing of our SOCRATES® wake vortex sensor. A substantial portion of our funding for research and development contracts of our SOCRATES® wake vortex sensor and AWSM™ technology has and is expected to continue to come from appropriations of the federal government. These appropriations, from which we have been allocated an aggregate of approximately \$19.8 million in contract funding to date, have been earmarked by Congress for the procuring federal agencies, FAA and NASA, for funding, monitoring and administering the development of SOCRATES® technology and AWSM™ technology to enhance airport and airline safety. We do not expect to receive further earmarks to fund development of our SOCRATES® or AWSM™ technology and no such earmarks or other funds have been included in the federal budget since U.S. fiscal year 2005. We anticipate further U.S. government funding for development of our SOCRATES® or AWSM™ technology, of which there can be no assurance, will occur at the direction of the FAA as part of its budgetary process.

Upon successful completion of research and development of our SOCRATES® wake vortex sensor, we would also depend upon the FAA for procurement and installation of AWSM™ systems, including our sensor, in U.S. airports. In June 2003, the FAA approved a long-term mission needs statement that contemplates expenditures by FAA and NASA of \$206 million during the period running from U.S. fiscal year 2003 through 2010 on wake vortex detection research and development, including deployment of a prototype AWSM™ and culminating in development of wake turbulence capability at selected airports and integration with controller tools. The mission needs statement has not and may not be approved at all necessary levels of the federal government and the federal government may not provide the funding required to complete

the mission needs statement, which must be annually requested by the FAA, authorized and approved by Congress, and approved by the President. There is no assurance as to what amount of contract funding, if any, we will receive in connection with the mission needs statement. Through U.S. fiscal year ending September 30, 2007, the FAA has not requested Congress to authorize or appropriate these funds. The FAA has assigned an overall moderate to high risk rating to this program due to technical unknowns and risks associated with getting controllers and pilots to accept a ground or flight deck, or both, based system.

We believe that the federal government has indicated a long-term interest in the development of a wake vortex avoidance system and our SOCRATES® wake vortex sensor for potential inclusion in such a system. In 2003, the federal government began an initiative to develop the Next Generation Air Traffic System (NGATS). NGATS is intended to be a more flexible and automated system "capable of meeting up to two or three times the current capacity demand by the year 2025". The federal government's Joint Planning and Development Office (JPDO) oversees a coalition of government agencies which are involved in developing NGATS, including the U.S. Departments of

Transportation, Defense, Homeland Security and Commerce and the FAA, NASA and White House Office of Science and Technology Policy. These organizations have developed a "roadmap" that defines the technologies that must be developed and implemented in order to achieve the goals of NGATS. Among those technologies are systems which allow for enhanced safety as well as increased throughput of air traffic at airports through reduction of the applied spacing between aircraft. This reduction will be accomplished, in part, "based on ground-based wake vortex detection and prediction," and according to the road-map is expected to be implemented and tested in the U.S. fiscal years 2008-2011 timeframe.

To our knowledge, the FAA has no plans to apply sufficient resources to the development of a WVAS incorporating both prediction and detection in time for implementation and testing in the timeframe called for by the NGATS roadmap. This disparity between the roadmap and FAA budgeting has been noted in Congressional communications to the FAA and we expect will be the subject of future discussions between the FAA and Congress, although there can be no assurances as to the pace or outcome of any such discussions.

The U.S. government may terminate any government contract at any time if it determines such termination is in the best interests of the government or may terminate, reduce or modify it because of budgetary constraints or any change in the government's requirements. Furthermore, the federal government may hold, reduce or eliminate future funding for research and development of our SOCRATES® wake vortex sensor or AWSM™ technology as a result of a reduction in support or opposition from supervising agencies, changes in budgetary priorities or decisions to fund competing systems or components of systems. When this occurs, it reduces

our resources available for research and development of our proprietary technologies, new products or enhancements to our SOCRATES®, AWSM™, UNICORN™ or TIICM™ technologies and to market our products. Reduction of funding from the federal government has delayed and in the future could continue to delay development of our technologies and achievement of or increases in profitability, create a substantial strain on our liquidity, resources, and product development, and have a material adverse effect on the progress of our research and development and our financial condition.

Our Intellectual Property and Technology

SOCRATES® Technology

We intend to rely on a combination of patent protection, trademark protection, trade secret protection, copyright protection, and confidentiality agreements to protect our intellectual property rights. We have received a United States patent relating to our SOCRATES® technology (US Patent No. 6,034,760 issued on March 7, 2000). We have received patents on the SOCRATES® technology in Australia, Canada, China, Democratic Peoples Republic of Korea, Israel, New Zealand, Norway, and Turkey. We have corresponding patent applications, based upon the United States application, for a patent on our SOCRATES® technology pending in Japan and the European Patent Organization. There can be no assurance any patent will issue from these pending applications. We also may apply to federally register various copyrights for our software and documentation with the United States Copyright Office and

abroad.

Our SOCRATES® technology patent, includes two fundamental claims: a method claim and an apparatus claim. The method claim covers a laser device that produces an optical beam, directs that beam into the atmosphere and measures the effect of sound waves on the beam as an indicator of hazardous weather conditions that have produced those sound waves in the atmosphere. The apparatus claim covers the apparatus for performing the method claim. Both of these claims cover systems that are mounted either directly on the front of an aircraft or on the ground adjacent to a runway.

We have taken certain steps to preserve our rights in our SOCRATES®-related technologies under our contracts with the federal government. However, as under any government funded research and development contract, the Federal Acquisition Regulations provide that the federal government may have paid-up rights to use our SOCRATES®-related technologies under certain circumstances.

On April 26, 2004, in conjunction with the renewal of a nondisclosure agreement, we were advised by Lockheed Martin Corporation that it owns a certain patent which predates our SOCRATES® patent and, according to Lockheed Martin Corporation, contains some intellectual property related to our SOCRATES® patent. We have conducted discussions with Lockheed Martin Corporation on this issue and other unresolved issues. We cannot predict or provide any assurance on the outcome of these discussions and whether any outcome will be satisfactory to us.

Also, our SOCRATES® trademark is now registered on the Principal Register, having Registration No. 2,967,386.

We filed a Patent Application with the United States Patent and Trademark Office in April 2006 for a method and apparatus for focused detection of hazardous atmospheric conditions, which is different in certain important technical respects from the earlier patent on SOCRATES® technology. This patent application comprises a system that can detect, via acoustic sensing, conditions in the atmosphere that are hazardous to aircraft that approach or depart from airport runways. There can be no assurance that any patent will result from our filing.

UNICORN™ Technology

We also have received a United States patent relating to our UNICORN™ technology (US Patent No. 6,211,808 issued on April 3, 2001 and re-issued as U.S. Patent No. RE 39,053 on April 4, 2006). We have received patents on the UNICORN™ technology in Australia, Canada, and New Zealand. We have a corresponding patent application, based

upon the United States application, for a patent on our UNICORN™ technology pending in Japan. However, there can be no assurance any patent will result from this pending application. We also may apply to federally register various copyrights for our software and documentation with the United States Copyright Office and abroad.

Our UNICORN™ technology patent includes claims which cover a collision avoidance airborne radar system. The invention incorporates a unique antenna design which provides three-dimensional surveillance to provide collision warning as well as ground proximity and terrain avoidance alerting to the pilot.

It selectively uses each microwave sector as a way to determine the direction of any received radar echo from another close-by aircraft or the ground below or terrain ahead that poses a potential threat within that coverage. Controlling the integration of these functions permits detection of several almost simultaneous potential threat encounters. The claims cover any UNICORN™-based system whose antenna may be fabricated in an equivalent way and subdivided for low drag-profile mounting above and below the fuselage of an aircraft. The UNICORN™ system is fully independent, in that, unlike most other collision avoidance systems in current use, it does not require that other aircraft in the vicinity have a cooperative warning system such as a transponder beacon.

Also, we re-applied for federal protection of our UNICORN™ trademark in the United States in July 2006. We have received a Notice of Allowance from the United States Patent and Trademark Office.

We filed a Patent Application with the United States Patent and Trademark Office in November 2005 for a collision alerting and avoidance system, which is different in certain important technical respects from the earlier patent on UNICORN™ technology. This patent application is for a collision alerting and avoidance system that utilizes an antenna array configured to operate with a "sing-around" transmitter/receiver to detect obstacles in its field of view. The collision alerting and avoidance system is useful for general aviation aircraft, as well as for unmanned aerial vehicles (UAVs) and marine vehicles. We have received a Notice of Allowance from the United States Patent and Trademark Office. A corresponding Patent Cooperation Treaty application was filed in November 2005. We have corresponding

patent applications, based upon the United States application, pending in the Democratic Peoples Republic of Korea, European Patent Organization and Japan. However, there can be no assurance any patents will result from these pending applications. We also may apply to federally register various copyrights for our software and documentation with the United States Copyright Office and abroad.

TIICM™ Technology

We filed a Patent Application with the United States Patent and Trademark Office in September 2005 relating to our TIICM™ (Tactical Integrated Illuminating Countermeasure) technology in conjunction with Sanders Design International (SDI), (a New Hampshire company). TIICM™ is intended to provide a low-cost, highly effective shield to protect airliners against the threat of certain terrorist missiles. Under our arrangement with SDI, we will share ownership of the TIICM™ patent, if the application results in a new patent award. There can be no assurance that any patent will result from our TIICM™ filing. We filed an application to obtain a federal trademark on TIICM™ in July 2005. The application was approved for publication but was subject to an Opposition Proceeding. The Opposition Proceeding has been terminated under agreement with the opposing party.

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We also filed a Patent Application with the United States Patent and Trademark Office in April 2007 for a central laser source based passive countermeasure system. This patent application is for a central laser source based passive countermeasure system used on an emission producing asset that utilizes a central laser source to produce optical energy. There can be no assurance that any patent will result from our filing.

AWSM™ Technology

We filed a Patent Application with the United States Patent and Trademark Office in June 2007 for an aircraft wake safety management system. This patent application is for an aircraft wake safety management system that predicts wake vortex behavior and determines if the wake vortex pair generated by a lead aircraft is in the flight path of a following aircraft. There can be no assurance any patents will result from these pending applications. We also may apply to federally register various copyrights for our software and documentation with the United States Copyright Office and abroad.

Also, we applied for federal protection of our AWSM™ trademark in the United States in November 2006. We have received a Notice of Allowance from the United States Patent and Trademark Office.

Government Approval and Regulations

The airport and airline industry is subject to extensive government oversight and regulation. To introduce a product for commercial sale, we must successfully complete research, development, and testing of the product and obtain necessary governmental approvals for installation of the product in airports or aircraft. For our SOCRATES® wake vortex sensors, the FAA must commission it and AWSM™ technology for use in the National Airspace System. As UNICORN™ and TIICM™ technologies are airborne systems, they must be FAA certified for use on aircraft. Any factor that delays or adversely affects this process, including delays in development or difficulty in obtaining federal government approval of the product, could adversely affect our business, financial condition, or results of operations.

Additionally, as a result of receiving funding from the federal government, our business and operations are subject to numerous government laws and regulations. In the near term, and for so long as we receive funding from the federal government, we will be subject to many procurement and accounting rules and regulations of the federal government. We are also subject to periodic audits by the Defense Contract Audit Agency. To date, we have completed seven audits and reports have been issued to our government customer which have stated that we are performing in full accordance with Federal Acquisitions Regulations.

Employees

As of May 31, 2007, we had eight full-time and four part-time employees. Our employees are not members of a union, and we are not aware of any efforts on their part to form or join a union. We believe that our relationship with our employees is good.

Item 2. Description of Property.

Our primary offices, located in Mystic, Connecticut, are leased at a monthly rate of \$2,755. We also utilize satellite office space that we lease or use on a month to month basis pursuant to the following arrangements with the following parties: (i) Baltimore, Maryland leased from our executive vice president and director, Frank L. Rees, at \$500 per month through December 31, 2006 and presently at no charge; (ii) Austin, Texas space provided without charge by our president and director, William B. Cotton; and (iii) North Kingston, Rhode Island leased from The Meadows Professional Office Park on an annual basis at a monthly rate of \$1,240; and (iv) Lancaster, Pennsylvania space provided without charge by our Senior Engineer Robert L. Cooperman, (v) office space in Denver, Colorado at \$500 per month. We believe that our facilities are adequate to satisfy our projected requirements and that additional space will be available if needed.

Item 3. Legal Proceedings.

Several lawsuits have been filed in the United States District Court for the District of Connecticut, by purchasers of our common stock naming us, certain of our executive officers, and certain underwriters, who sold shares of our common stock to the public, as defendants. The suits assert claims under Section 10b of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder and under Section 11 of the Securities Act of 1933 and breach of fiduciary duty. The complaints allege, among other things, that we failed to disclose material details from a report circulated by Volpe in October 2001, which generally concerned the timetable and our prospects for achieving operational viability of the SOCRATES® wake vortex sensor. The plaintiffs seek unspecified damages on behalf of a purported class of purchasers of our securities. The cases were consolidated by the Court into one action and lead counsel was appointed by the Court. In 2006, we moved to dismiss all claims. The Court has not ruled on the motion yet.

On June 28, 2006, we received notice that Analogic Corporation filed a lawsuit against us and our CEO and Sanders Design International (SDI) and its principals over alleged contractual interference relating to development of TIICM™ countermanpads technology on which SDI and we have filed a joint patent application. Analogic's lawsuit, among other things, asserts that we and SDI infringed Analogic's rights under a 2003 license agreement between SDI and Analogic by entering into a teaming agreement in 2004 and filing the joint patent application on TIICM™ in 2005. We have filed affirmative defenses and a counterclaim against Analogic and its former president.

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We firmly believe that the claims contained in these lawsuits are without merit and intend to conduct a vigorous defense in these matters. These lawsuits could be time-consuming and costly and could divert the attention of our management. These lawsuits or any future lawsuits filed against us could harm our business.

As previously reported, we learned in December 2003 that the United States Securities and Exchange Commission staff was conducting an informal investigation which appeared to be looking into certain analyst reports about us, and our press releases. The Commission staff did not assert that we acted improperly or illegally and we voluntarily cooperated fully with the staff's informal investigation. We believe that we acted properly and legally with respect to these analyst reports and our press releases. On August 22, 2006, we received notification from the Commission that it has terminated its informal investigation of us with no enforcement action recommended.

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

None.

PART II

Item 5. Market for Common Equity and Related Stockholder Matters.

Market Information

On January 30, 2004, our common stock became eligible to trade on the American Stock Exchange, or AMEX, under the symbol FLT. As of May 31, 2007, we had 8,235,210 shares of common stock outstanding, of which 6,694,276 shares trade on the AMEX. The following chart shows the high and low sales price of our common stock for each of our fiscal quarters as quoted on the AMEX:

| Fiscal Quarter | High | Low |
|----------------|--------|--------|
| 8/31/05 | \$1.64 | \$1.21 |
| 11/30/05 | \$3.90 | \$1.35 |
| 2/28/06 | \$3.19 | \$2.00 |
| 5/31/06 | \$2.88 | \$2.05 |
| 8/31/06 | \$2.74 | \$2.20 |
| 11/30/06 | \$2.60 | \$1.16 |
| 2/28/07 | \$1.86 | \$1.08 |

5/31/07

\$2.40

\$1.60

As of May 31, 2007, we had 89 record holders of our common stock, as reflected on the books of our transfer agent. A significant number of shares were held in street name and, as such, we believe that the actual number of beneficial owners is significantly higher.

Equity Compensation Plans

We adopted the 2005 Stock Incentive Plan in October 2005. Under the terms of the 2005 Plan, all of our employees, directors, consultants and advisors are eligible to be granted options, restricted stock awards, or other stock-based awards. Under the 2005 Plan, a total of 1,500,000 shares of our common stock are available for issuance, of which 46,400 shares remain available for future awards as of May 31, 2007. In addition, the shareholder vote that approved the 2005 Plan also approved previous awards totaling 570,000 shares of our common stock.

The Compensation Committee of our board of directors, in its discretion, selects the person(s) to whom stock based awards may be granted, the time or times at which such awards shall be granted, the number of shares subject to each such grant, and the term of the award. The exercise price of options granted under the 2005 Plan is determined by the Committee at the time the options are granted but may not be less than 100% of the fair market value of the common stock on the date such option is granted; provided, however, the exercise price of an incentive stock option granted to a 10% or greater shareholder may not be less than 110% of the fair market value of the common stock on the date such option is granted.

Options granted under the 2005 Plan expire no later than ten (10) years from the date of grant; provided that in the case of an incentive stock option granted to a 10% shareholder, the term of the option may be no more than five (5) years from the date of grant. No option may be exercised after the expiration of its term.

Our Board also approved the issuance of up to a total of 114,000 shares of our common stock, which was held in treasury, to our two lobbyists, who include Jackson Kemper, one of our directors. These shares are not registered for public trading and are subject to the restrictions under Rule 144 promulgated by the U.S. Securities and Exchange Commission.

The table below provides information relating to our equity compensation plans as of May 31, 2007.

| <u>Plan category</u> | Number of securities to be issued upon exercise of outstanding options, warrants and rights | Weighted-average price of outstanding options, warrants and rights | Number of securities remaining available for future issuance under compensation plans (excluding securities reflected in first column) |
|--|---|--|--|
| Equity compensation plans approved by shareholders | 2,023,600 | \$3.50 | 46,400 |
| Equity compensation plans not approved by security shareholders (a) | 31,249 | 6.00 | (a) |

(a) The equity compensation plan not approved by shareholders is comprised of individual common stock option agreements issued to directors, prior to the adoption of the Company's current stock option plan. The common stock options vest between one and three years of the date of issue and expire within three years of the vesting date. The exercise prices of the current outstanding options are \$6.00 per share.

| <u>Options issued to:</u> | <u>Number of options</u> | <u>Exercise price</u> | <u>Vesting dates</u> | <u>Expiration dates</u> |
|---------------------------|--------------------------|-----------------------|----------------------|-------------------------|
| Directors | | \$6.00 | 2003-2005 | |
| Total issued | | | | 2006-2008 |

31,249

31,249

Dividends

We have never declared or paid any cash dividends on our common stock. For the foreseeable future, we intend to retain any earnings to finance the development and expansion of our business, and we do not anticipate paying any cash dividends on our common stock. Any future determination to pay dividends will be at the discretion of our board of directors and will be dependent upon then existing conditions, including our financial condition and results of operations, capital requirements, contractual restrictions, business prospects, and other factors that our board of directors considers relevant.

Recent Sales of Unregistered Securities

There have been no sales of unregistered securities within the last three years which would be required to be disclosed pursuant to Item 701 of Regulation S-B.

Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Cautionary Statement Pursuant to Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995:

Except for the historical information presented in this document, the matters discussed in this quarterly report on Form 10-KSB for the fiscal year ended May 31, 2007 or otherwise incorporated by reference into this document, contain "forward-looking statements" (as such term is defined in the Private Securities Litigation Reform Act of 1995). These statements are identified by the use of forward-looking terminology such as "believes", "plans", "intend", "scheduled", "potential", "continue", "estimates", "hopes", "goal", "objective", "expects", "may", "will", "should" or "anticipates" or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties. The safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, apply to forward-looking statements made by us. We caution you that no statements contained in this Form 10-KSB should be construed as a guarantee or assurance of future performance or results. These forward-looking statements involve risks and uncertainties, which include risks and uncertainties associated with, among other things, the outcome of pending class action litigation alleging violations of federal securities laws, the outcome of Massachusetts federal district court litigation initiated by

Analogic Corporation concerning our TIICM™ technology, whether the government will implement wake vortex advisory system at all or with the inclusion of a SOCRATES® wake vortex sensor, the impact of competitive products and pricing, limited visibility into future product demand, slower economic growth generally, difficulties inherent in the development of complex technology, new products sufficiency, availability of capital to fund operations, research and development, fluctuations in operating results, and these and other risks are discussed in the "Known Trends, Risks and Uncertainties" section Management's Discussion and Analysis of Financial Conditions and Results of Operations of this Form 10-KSB. The actual results that we achieve may differ materially from any forward-looking statements due to such risks and uncertainties. These forward-looking statements are based on current expectations, and, except as required by law, we assume no obligation to update this information whether as a result of new information, future events or otherwise. Readers are urged to carefully review and consider the various disclosures made by us in this Form 10-KSB and in our other reports filed with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business.

Overview

Our operations to date have been funded substantially by U.S. Congressional appropriations resulting in four successive sole source contracts with agencies of the federal government for research, development, and testing of our SOCRATES® wake vortex sensor and related work pertaining to a wake vortex advisory system, sometimes referred to as WVAS, that National Aeronautics and Space Administration (NASA) has been developing. We estimate the appropriations to the Federal Aviation Administration (FAA) totaled approximately \$9.6 million in U.S. fiscal years ended September 30, 1997 through September 30, 2000 for research and development of our SOCRATES® wake vortex sensor; and appropriations to NASA for research and development of our SOCRATES® wake vortex sensor totaled approximately \$18.5 million in U.S. fiscal years ended September 30, 2001 through September 30, 2005. To date the total government appropriations for SOCRATES® and WVAS is approximately \$28.1 million. From these amounts, we have received four contracts aggregating approximately \$19.8 million in funding and as of May 31, 2007, we have recognized an aggregate of approximately \$19.8 million of contract revenue. Our current SOCRATES® government contract backlog as of May 31, 2007 is \$0. The balance of the government appropriations from 1997 to 2005 of approximately \$8.3 million has funded the FAA and NASA program management and technical participation in the development of our SOCRATES® wake vortex sensor and AWSM™ technology.

We have entered into these contracts with the Volpe National Transportation Systems Center of the U.S. Department of Transportation (Volpe). Volpe funds our contracts when, as, and if it and other sponsoring federal agencies approve

a statement of work and specific task orders under the statement of work. When funded, we invoice the federal government monthly based on our direct costs, including overhead and general and administrative plus a fixed fee for that month and typically receive payment by electronic wire transfer within two weeks of invoicing. Certain costs, such as lobbying, product development, and business development expenses that are not allowable under these contracts, research and development costs we incur over certain cost caps set by the U.S. government, costs incurred while our contracts are not funded, or costs deemed unreasonable, and hence unrecoverable, by the government are not reimbursable under our government contracts and have been funded primarily by proceeds of our equity offerings. All of our government contracts and funding are subject to the requirements of the Federal Acquisition Regulations.

On September 25, 2005, we received our fourth successive contract from Volpe in the aggregate amount of approximately \$9.8 million to continue research, development and testing of our SOCRATES® and AWSM™ technologies. The initial task order funding under this new contract provided approximately \$1.7 million of contract funding to us and was dated September 25, 2005. On January 27, 2006 we received our second task order under this new contract which provided approximately \$1.4 million of additional funding.

The second task order funding was completely expended as of December 31, 2006. Our ability to generate additional revenue under our Phase IV contract is subject to further U.S. government funding and the issuance of additional task orders of which there can be no assurance. If additional funding becomes available under the Phase IV contract, the remaining amount of \$6.7 million can be funded with new task orders which generally require less administrative effort than a new contract award. No such task orders have been requested or are being processed at the present time.

The table below represents the U.S. Government funding to date for our four SOCRATES® contracts.

| SOCRATES® Phase | Contract Number | Contract Funding | Period of Performance |
|--------------------|--|---------------------|---|
| I | DTRS-57-97-C-00042 | \$3,019,355 | From June 1, 1997 To July 31, 1999 |
| II | DTRS-57-99-D-00074 | \$6,062,948 | From August 27, 1999 To December 31, 2003 |
| III | DTRS-57-03-D-30024 | \$7,617,165 | From November 1, 2003 To October 15, 2005 |
| IV | DTRT-57-05-D-30115 Task Order No: T0001 | \$1,695,029 | From September 15, 2005 To March 31, 2006 |
| | DTRT-57-05-D-30115 Task Order No: T0002 | <u>\$1,409,025</u> | From January 27, 2006 To December 31, 2006 |

Total contract funding to date \$19,803,522

We believe that the federal government has indicated a long-term interest in the development of a wake vortex avoidance system and our SOCRATES® wake vortex sensor for potential inclusion in such a system. In 2003, the federal government began an initiative to develop the Next Generation Air Traffic System (NGATS). NGATS is intended to be a more flexible and automated system "capable of meeting up to two or three times the current capacity demand by the year 2025". The federal government's Joint Planning and Development Office (JPDO) oversees a coalition of government agencies which are involved in developing NGATS, including the U.S. Departments of Transportation, Defense, Homeland Security and Commerce

and the FAA, NASA and White House Office of Science and Technology Policy. These organizations have developed a "roadmap" that defines the technologies that must be developed and implemented in order to achieve the goals of NGATS. Among those technologies are systems which allow for enhanced safety as well as increased throughput of air traffic at airports through reduction of the applied spacing between aircraft. This reduction will be accomplished, in part, "based on ground-based wake vortex detection and prediction," expected to be implemented and tested in the U.S. fiscal years 2008-2011 timeframe.

To our knowledge, the FAA has no plans to apply sufficient resources to the development of a WVAS incorporating both prediction and detection in time for implementation and testing in the timeframe called for by the NGATS roadmap. This disparity between the roadmap and FAA budgeting has been noted in Congressional communications to the FAA and we expect will be the subject of future discussions between the FAA and Congress, although there can be no assurances as to the pace or outcome of any such discussions.

There were no stipulated earmarks or other sources of funding in the U.S. fiscal year 2006 and fiscal year 2007 budget for further testing and development of SOCRATES®-based technology. In the FAA budget request submitted to the U.S. Congress for fiscal year 2008, which commences October 1, 2007, a total of \$13.755 million is specified for wake vortex research and development. Although this represents a threefold increase over previous FAA budget modifications for wake vortex research, there is no assurance that we will receive any of these funds, even if approved by the U.S. Congress and the President. We are continuing to explore additional funding opportunities from potential sources in the NASA and/or U.S. Department of Transportation (DOT) budgets and from the private sector for research and development of SOCRATES® and AWSM™ technologies, but can make no assurances of whether or when we will obtain such additional funding. Our inability to obtain or any delay in such contract funding for research and development of SOCRATES® and AWSM™ technologies from the federal government or other sources has delayed and could continue to delay further research, development and testing; could eliminate or continue to delay achievement of profitability, if any; has created a substantial strain on our liquidity, resources and product development; and has had a material adverse effect on the progress of our technology research and development and our financial condition.

We also are pursuing development of an airborne collision and ground proximity warning system for aircraft that we refer to as UNICORN™. We believe that UNICORN™ may have application to manned and unmanned air vehicles operated for a variety of private and governmental purposes. As of fiscal year ended May 31, 2007, our direct cumulative research and development expenses for UNICORN™ total approximately \$1,318,000. During August 2005 we tested a UNICORN™ prototype antenna in a proof-of-principle test. The data collected from this test has been analyzed and the results were favorable. Since that time, our research, testing and development activities on UNICORN™ activity have been limited, while we evaluated the market for this technology and pursued financing for it. In November, 2006, we engaged a placement agent to assist us in pursuing a tax advantaged joint venture financing to complete the research and development of our UNICORN™ technology for general aviation aircraft and unmanned aerial vehicles (UAV's). In support of this effort we have incurred cumulative expenses for legal fees, placement agent fees, market assessment and business planning expenses of approximately \$380,000. The original engaged placement agent agreement has been cancelled and we have engaged a new placement agent, to secure this financing. The market assessment was prepared by Charles River Associates based in Boston, Massachusetts. There can be no guarantee or assurance that we will complete a financing to fund our UNICORN™ technology research and development. If we do not complete such a financing, we will continue to pursue private and federal government funding to develop UNICORN™ UAV applications. On April 2, 2007, we received an Air Force contract to begin the research and development of UNICORN™ for UAV's. This contract is for approximately \$99,000 and has a nine month period of performance.

During our fiscal year 2005, we also began the exploratory development of a third major technology initiative called TIICM™ (Tactical Integrated Illuminating Countermeasure) in conjunction with Sanders Design International (SDI), a New Hampshire company. TIICM™ technology is intended to provide a low cost yet highly effective shield of protection for airliners against the threat of certain terrorist-launched missiles. In April 2004, we executed a ten year Teaming Agreement with SDI under which we would be the prime contractor on development of countermeasure technologies to protect aircraft from shoulder-fired missiles. As of fiscal year ended May 31, 2007 our cumulative direct independent research and development expense for TIICM™ technology is approximately \$700,000. We have

entered into additional arrangements with SDI pursuant to which we have applied for a new patent